```
Lys Asp Phe Tyr Val Val Glu Pro Leu Ala Phe Glu Gly Thr Pro Glu
        195             200             205

Gln Lys Ala Leu Val Ile Gly Gly Glu Ala Cys Met Trp Gly Glu Tyr
        210             215             220

Val Asp Asn Thr Asn Leu Val Pro Arg Leu Trp Pro Arg Ala Xaa Ala
225             230             235             240

Val Ala Glu Arg Leu Trp Ser Asn Lys Leu Thr Ser Asp Leu Thr Phe
            245             250             255

Ala Tyr Glu Arg Leu Ser His Phe Arg Cys Glu Leu Leu Arg Arg Gly
            260             265             270

Val Gln Ala Gln Pro Leu Asn Val Gly Phe Cys Glu Gln Glu Phe Glu
        275             280             285

Gln Thr
    290
```

```
<210> 593
<211> 665
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 593
Asp Ala Asp Gly Arg Met Asp Xaa Leu Val Ser Glu Cys Ser Ala Arg
 1              5               10              15

Leu Leu Gln Gln Glu Glu Glu Ile Lys Ser Leu Thr Ala Glu Ile Asp
            20              25              30

Arg Leu Lys Asn Cys Gly Cys Leu Gly Ala Ser Pro Asn Leu Glu Gln
        35              40              45

Leu Gln Glu Glu Asn Leu Lys Leu Lys Tyr Arg Leu Asn Ile Leu Arg
    50              55              60

Lys Ser Leu Gln Ala Glu Arg Asn Lys Pro Thr Lys Asn Met Ile Asn
65              70              75              80

Ile Ile Ser Arg Leu Gln Glu Val Phe Gly His Ala Ile Lys Ala Ala
```

```
                        85                    90                    95

    Tyr Pro Asp Leu Glu Asn Pro Pro Leu Leu Val Thr Pro Ser Gln Gln
                100               105               110

    Ala Lys Phe Gly Asp Tyr Gln Cys Asn Ser Ala Met Gly Ile Ser Gln
                115               120               125

    Met Leu Lys Thr Lys Glu Gln Lys Val Asn Pro Arg Glu Ile Ala Glu
        130               135               140

    Asn Ile Thr Lys His Leu Pro Asp Asn Glu Cys Ile Glu Lys Val Glu
    145               150               155               160

    Ile Ala Gly Pro Gly Phe Ile Asn Val His Leu Arg Lys Asp Phe Val
                165               170               175

    Ser Glu Gln Leu Thr Ser Leu Leu Val Asn Gly Val Gln Leu Pro Ala
                180               185               190

    Leu Gly Glu Asn Lys Lys Val Ile Val Asp Phe Ser Ser Pro Asn Ile
                195               200               205

    Ala Lys Glu Met His Val Gly His Leu Arg Ser Thr Ile Ile Gly Glu
        210               215               220

    Ser Ile Ser Arg Leu Phe Glu Phe Ala Gly Tyr Asp Val Leu Arg Leu
    225               230               235               240

    Asn His Val Gly Asp Trp Gly Thr Gln Phe Gly Met Leu Ile Ala His
                245               250               255

    Leu Gln Asp Lys Phe Pro Asp Tyr Leu Thr Val Ser Pro Pro Ile Gly
                260               265               270

    Asp Leu Gln Val Phe Tyr Lys Glu Ser Lys Lys Arg Phe Asp Thr Glu
                275               280               285

    Glu Glu Phe Lys Lys Arg Ala Tyr Gln Cys Val Val Leu Leu Gln Gly
        290               295               300

    Lys Asn Pro Asp Ile Thr Lys Ala Trp Lys Leu Ile Cys Asp Val Ser
    305               310               315               320

    Arg Gln Glu Leu Asn Lys Ile Tyr Asp Ala Leu Asp Val Ser Leu Ile
                325               330               335

    Glu Arg Gly Glu Ser Phe Tyr Gln Asp Arg Met Asn Asp Ile Val Lys
                340               345               350

    Glu Phe Glu Asp Arg Gly Phe Val Gln Val Asp Asp Gly Arg Lys Ile
```

```
              355                   360                   365

 Val Phe Val Pro Gly Cys Ser Ile Pro Leu Thr Ile Val Lys Ser Asp
     370             375             380

 Gly Gly Tyr Thr Tyr Asp Thr Ser Asp Leu Ala Ala Ile Lys Gln Arg
 385             390             395             400

 Leu Phe Glu Glu Lys Ala Asp Met Ile Ile Tyr Val Val Asp Asn Gly
             405             410             415

 Gln Ser Val His Phe Gln Thr Ile Phe Ala Ala Ala Gln Met Ile Gly
             420             425             430

 Trp Tyr Asp Pro Lys Val Thr Arg Val Phe His Ala Gly Phe Gly Val
         435             440             445

 Val Leu Gly Glu Asp Lys Lys Lys Phe Lys Thr Arg Ser Gly Glu Thr
     450             455             460

 Val Arg Leu Met Asp Leu Leu Gly Glu Gly Leu Lys Arg Ser Met Asp
 465             470             475             480

 Lys Leu Lys Glu Lys Glu Arg Asp Lys Val Leu Thr Ala Glu Glu Leu
             485             490             495

 Asn Ala Ala Gln Thr Ser Val Ala Tyr Gly Cys Ile Lys Tyr Ala Asp
             500             505             510

 Leu Ser His Asn Arg Leu Asn Asp Tyr Ile Phe Ser Phe Asp Lys Met
         515             520             525

 Leu Asp Asp Arg Gly Asn Thr Ala Ala Tyr Leu Leu Tyr Ala Phe Thr
     530             535             540

 Arg Ile Arg Ser Ile Ala Arg Leu Ala Asn Ile Asp Glu Glu Met Leu
 545             550             555             560

 Gln Lys Ala Ala Arg Glu Thr Lys Ile Leu Leu Asp His Glu Lys Glu
             565             570             575

 Trp Lys Leu Gly Arg Cys Ile Leu Arg Phe Pro Glu Ile Leu Gln Lys
             580             585             590

 Ile Leu Asp Asp Leu Phe Leu His Thr Leu Cys Asp Tyr Ile Tyr Glu
         595             600             605

 Leu Ala Thr Ala Phe Thr Glu Phe Tyr Asp Ser Cys Tyr Cys Val Glu
     610             615             620

 Lys Asp Arg Gln Thr Gly Lys Ile Leu Lys Val Asn Met Trp Arg Met
```

552

```
  625                  630                 635                 640
Leu Leu Cys Glu Ala Val Ala Ala Val Met Ala Lys Gly Phe Asp Ile
                645                 650                 655
Leu Gly Ile Lys Pro Val Gln Arg Met
                660        .        665
```

```
<210> 594
<211> 116
<212> PRT
<213> Homo sapiens

<400> 594
Thr Val Thr Glu Thr Thr Val Thr Val Thr Thr Glu Pro Glu Asn Arg
  1               5                  10                  15

Ser Leu Thr Ile Lys Leu Arg Lys Arg Lys Pro Glu Lys Lys Val Glu
                20                  25                  30

Trp Thr Ser Asp Thr Val Asp Asn Glu His Met Gly Arg Arg Ser Ser
                35                  40                  45

Lys Cys Cys Cys Ile Tyr Glu Lys Pro Arg Ala Phe Gly Glu Ser Ser
        50                  55                  60

Thr Glu Ser Asp Glu Glu Glu Glu Glu Gly Cys Gly His Thr His Cys
65                  70                  75                  80

Val Arg Gly His Arg Lys Gly Arg Arg Arg Ala Thr Leu Gly Pro Thr
                85                  90                  95

Pro Thr Thr Pro Pro Gln Pro Pro Asp Pro Ser Gln Pro Pro Pro Gly
                100                 105                 110

Pro Met Gln His
        115
```

```
<210> 595
<211> 294
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (269)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220>
<221> SITE
<222> (278)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 595
Thr Gln Leu Arg Val Ser Glu Arg Glu Gly Pro Gly Asp Pro Gln Arg
 1   5   10   15

Phe Ser Asp His Thr Leu Arg Thr Pro Arg Leu Glu Asp Arg Pro Gly
            20   25   30

Asp Ala Met Trp Gly Glu Gly Leu Arg Ala Trp Cys Arg Phe Val Glu
            35   40   45

Asn Arg Trp Cys Leu Lys Arg Val Ser Ala Pro Leu His Leu Gly Leu
    50   55   60

Leu Gly Cys Pro Asp Ala Glu Ala His Phe Pro Ala Met Leu Thr Leu
 65   70   75   80

Pro Leu Ser Pro Pro Ser Arg Lys Met Ala Thr Asn Phe Leu Ala His
                85   90   95

Glu Lys Ile Trp Phe Asp Lys Phe Lys Tyr Asp Asp Ala Glu Arg Arg
            100   105   110

Phe Tyr Glu Gln Met Asn Gly Pro Val Ala Gly Ala Ser Arg Gln Glu
            115   120   125

Asn Gly Ala Ser Val Ile Leu Arg Asp Ile Ala Arg Ala Arg Glu Asn
    130   135   140

Ile Gln Lys Ser Leu Ala Gly Ser Ser Gly Pro Gly Ala Ser Ser Gly
145   150   155   160

Thr Ser Gly Asp His Gly Glu Leu Val Val Arg Ile Ala Ser Leu Glu
                165   170   175

Val Glu Asn Gln Ser Leu Arg Gly Val Val Gln Glu Leu Gln Gln Ala
            180   185   190

Ile Ser Lys Leu Glu Ala Arg Leu Asn Val Leu Glu Lys Ser Ser Pro
            195   200   205

Gly His Arg Ala Thr Ala Pro Gln Thr Gln His Val Ser Pro Met Arg
    210   215   220

Gln Val Glu Pro Pro Ala Lys Lys Pro Ala Thr Pro Ala Glu Asp Asp
225   230   235   240

```
Glu Asp Asp Asp Ile Asp Leu Phe Gly Ser Asp Asn Glu Glu Glu Asp
                245                 250                 255

Lys Glu Ala Ala Gln Leu Arg Glu Glu Arg Leu Arg Xaa Tyr Ala Glu
                260                 265                 270

Lys Lys Ala Lys Lys Xaa Ala Leu Val Ala Lys Ser Ser Ile Leu Leu
            275                 280                 285

Asp Phe Lys Pro Trp Gly
        290
```

```
<210> 596
<211> 134
<212> PRT
<213> Homo sapiens

<400> 596
Val Ser Arg Leu Gly Leu Leu Thr Pro Leu Gly Cys Ser Phe Gly Thr
  1               5                 10                  15

Asp Glu Trp Leu Cys Pro Val Thr Ala Leu Ser Leu Pro Gly Gly Tyr
            20                  25                  30

Val His Ser Arg Pro Leu Pro Arg Leu Arg Pro Met Arg Tyr Gly Asp
        35                  40                  45

Thr Leu Ala Pro Arg Ser Trp Arg His Arg Pro Leu Pro Trp His Ser
    50                  55                  60

Ser Phe Ala Gly Asp Pro Pro Leu Pro Lys Ala Leu Ser Pro Cys Ser
65                  70                  75                  80

His Ser Arg Arg Thr Ala Ala Arg Ala Ser Gly Ser Leu Ala Thr Gly
                85                  90                  95

Phe Glu Arg Leu His Ser Trp Gly Leu Glu Gly Gly Val Pro Lys Ala
            100                 105                 110

Leu Ser Lys Ser Gln Ser Ser Ser His Gln Ser Leu Tyr Lys Val Leu
        115                 120                 125

Gly Pro Glu Ala Leu Pro
        130
```

```
<210> 597
```

<210> 91
<212> PRT
<213> Homo sapiens

<400> 597
Glu Gly Pro Glu Gly Ala Asn Leu Phe Ile Tyr His Leu Pro Gln Glu
 1   5   10   15

Phe Gly Asp Gln Asp Ile Leu Gln Met Phe Met Pro Phe Gly Asn Val
            20   25   30

Ile Ser Ala Lys Val Phe Ile Asp Lys Gln Thr Asn Leu Ser Lys Cys
        35   40   45

Phe Gly Phe Val Ser Tyr Asp Asn Pro Val Ser Ala Gln Ala Ala Ile
    50   55   60

Gln Ala Met Asn Gly Phe Gln Ile Gly Met Lys Arg Leu Lys Val Gln
65   70   75   80

Leu Lys Arg Ser Lys Asn Asp Ser Lys Pro Tyr
                85   90

<210> 598
<211> 68
<212> PRT
<213> Homo sapiens

<400> 598
Arg Pro Thr Arg Pro Glu Lys Val Gly Ser Gly Gly Ser Ser Val Gly
 1   5   10   15

Ser Gly Asp Ala Ser Ser Ser Arg His His His Arg Arg Arg Arg Phe
            20   25   30

His Leu Pro Gln Gln Pro Leu Leu Gln Arg Glu Val Trp Cys Val Gly
        35   40   45

Thr Thr Gly Asn Ala Asn Gln Ala Gln Ser Ser Thr Glu Gln Thr Leu
    50   55   60

Leu Lys Pro Lys
65

<210> 599
<211> 119
<212> PRT

556

<213> Homo sapiens

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 599
Phe Gly Arg Asp Gln Val Tyr Leu Ser Tyr Asn Asn Val Ser Ser Leu
 1   5   10   15

Lys Met Leu Val Ala Lys Asp Asn Trp Val Leu Ser Ser Glu Ile Ser
            20   25   30

Gln Val Arg Leu Tyr Thr Leu Glu Asp Asp Lys Phe Leu Ser Phe His
            35   40   45

Met Glu Met Val Val His Val Asp Ala Xaa Gln Ala Phe Leu Leu Leu
        50   55   60

Ser Asp Leu Xaa Gln Arg Pro Glu Trp Asp Lys His Tyr Arg Ser Val
65   70   75   80

Glu Leu Val Gln Gln Val Asp Xaa Gly Arg Arg His Leu Pro Arg His
                85   90   95

Gln Xaa Xaa Pro Arg Arg Ser His Lys Ala Pro Gly Leu Arg Asp Pro
                100   105   110

Gly Leu Glu Ala Glu Ala Leu
        115

557

```
<210> 600
<211> 177
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (69)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 600
Xaa Glu Arg Leu Arg Ala Gln Xaa Glu Lys Ser Arg Asp Ser Gln Pro
 1               5                  10                  15


Arg Leu Pro Leu Arg Phe Pro Ser Trp Arg Gly Pro Trp Cys Gly Ile
            20                  25                  30


Glu Ile Ala Gly Tyr Gly Ala Glu Val Phe Arg Gln Tyr Trp Asp Ile
        35                  40                  45


Pro Asp Gly Thr Asp Cys His Arg Lys Ala Tyr Ser Thr Thr Ser Ile
    50                  55                  60


Ala Ser Val Ala Xaa Leu Thr Ala Ala Ala Tyr Arg Val Thr Leu Asn
65                  70                  75                  80


Pro Pro Gly Thr Phe Leu Glu Gly Val Ala Lys Val Gly Gln Tyr Thr
                85                  90                  95


Phe Thr Ala Ala Ala Val Gly Ala Val Phe Gly Leu Thr Thr Cys Ile
            100                 105                 110


Ser Ala His Val Arg Glu Lys Pro Asp Asp Pro Leu Asn Tyr Phe Leu
```

```
              115                  120                  125
Gly Gly Cys Ala Gly Gly Xaa Thr Leu Gly Ala Arg Thr His Asn Tyr
    130              135                  140
Gly Ile Gly Ala Ala Ala Cys Val Tyr Phe Gly Ile Ala Ala Ser Leu
145              150                  155                  160
Val Lys Met Gly Arg Leu Glu Gly Trp Glu Val Phe Ala Lys Pro Lys
                165                  170                  175
Val
```

```
<210> 601
<211> 218
<212> PRT
<213> Homo sapiens

<400> 601
Arg Gly Gly Gly Gly Gly Ala Ser Ser Cys Cys Cys Cys Ala Pro Ser
    1               5                  10                  15
Pro Arg Gly Arg Pro Val Pro Ala Arg Thr Pro Arg Arg Cys Pro Arg
            20                  25                  30
Pro Ser Pro Gly Pro Ala Met Gly Leu Thr Val Ser Ala Leu Phe Ser
        35                  40                  45
Arg Ile Phe Gly Lys Lys Gln Met Arg Ile Leu Met Val Gly Leu Asp
    50                  55                  60
Ala Ala Gly Lys Thr Thr Ile Leu Tyr Lys Leu Lys Leu Gly Glu Ile
65                  70                  75                  80
Val Thr Thr Ile Pro Thr Ile Gly Phe Asn Val Glu Thr Val Glu Tyr
                85                  90                  95
Lys Asn Ile Cys Phe Thr Val Trp Asp Val Gly Gly Gln Asp Lys Ile
            100                 105                 110
Arg Pro Leu Trp Arg His Tyr Phe Gln Asn Thr Gln Gly Leu Ile Phe
        115                 120                 125
Val Val Asp Ser Asn Asp Arg Glu Arg Val Gln Glu Ser Ala Asp Glu
    130                 135                 140
Leu Gln Lys Met Leu Gln Glu Asp Glu Leu Arg Asp Ala Val Leu Leu
145                 150                 155                 160
```

```
Val Phe Ala Asn Lys Gln Asp Met Pro Asn Ala Met Pro Val Ser Glu
                165             170             175

Leu Thr Asp Lys Leu Gly Leu Gln His Leu Arg Ser Arg Thr Trp Tyr
            180             185             190

Val Gln Ala Thr Cys Ala Thr Gln Gly Thr Gly Leu Tyr Asp Gly Leu
        195             200             205

Asp Trp Leu Ser His Glu Leu Ser Lys Arg
    210             215
```

```
<210> 602
<211> 829
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (454)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 602
Pro Gly Gln Ala Gly Ala Glu Gly His Val Arg Cys Cys Pro Gly Glu
 1           5               10              15

Glu Gln Lys Ala Gly Gly Glu Arg Arg Cys Pro Gly Pro Gln Arg Xaa
            20              25              30

Gly Ala Ala Leu Gly Pro Gly Pro Gly Glu Ala Arg Leu Asp Tyr Ser
        35              40              45

Glu Phe Phe Thr Glu Asp Val Gly Gln Leu Pro Gly Leu Thr Ile Trp
    50              55              60

Gln Ile Glu Asn Phe Val Pro Val Leu Val Glu Glu Ala Phe His Gly
65              70              75              80

Lys Phe Tyr Glu Ala Asp Cys Tyr Ile Val Leu Lys Thr Phe Leu Asp
            85              90              95

Asp Ser Gly Ser Leu Asn Trp Glu Ile Tyr Tyr Trp Ile Gly Gly Glu
            100             105             110
```

560

```
Ala Thr Leu Asp Lys Lys Ala Cys Ser Ala Ile His Ala Val Asn Leu
        115             120             125

Arg Asn Tyr Leu Gly Ala Glu Cys Arg Thr Val Arg Glu Glu Met Gly
        130             135             140

Asp Glu Ser Glu Glu Phe Leu Gln Val Phe Asp Asn Asp Ile Ser Tyr
145             150           . 155             160

Ile Glu Gly Gly Thr Ala Ser Gly Phe Tyr Thr Val Glu Asp Thr His
                165             170             175

Tyr Val Thr Arg Met Tyr Arg Val Tyr Gly Lys Lys Asn Ile Lys Leu
            180             185             190

Glu Pro Val Pro Leu Lys Gly Thr Ser Leu Asp Pro Arg Phe Val Phe
        195             200             205

Leu Leu Asp Arg Gly Leu Asp Ile Tyr Val Trp Arg Gly Ala Gln Ala
    210             215             220

Thr Leu Ser Ser Thr Thr Lys Ala Arg Leu Phe Ala Glu Lys Ile Asn
225             230             235             240

Lys Asn Glu Arg Lys Gly Lys Ala Glu Ile Thr Leu Leu Val Gln Gly
            245             250             255

Gln Glu Leu Pro Glu Phe Trp Glu Ala Leu Gly Gly Glu Pro Ser Glu
            260             265             270

Ile Lys Lys His Val Pro Glu Asp Phe Trp Pro Pro Gln Pro Lys Leu
        275             280             285

Tyr Lys Val Gly Leu Gly Leu Gly Tyr Leu Glu Leu Pro Gln Ile Asn
        290             295             300

Tyr Lys Leu Ser Val Glu His Lys Gln Arg Pro Lys Val Glu Leu Met
305             310             315             320

Pro Arg Met Arg Leu Leu Gln Ser Leu Leu Asp Thr Arg Cys Val Asn
            325             330             335

Ile Leu Asp Cys Trp Ser Asp Val Phe Ile Trp Leu Gly Arg Lys Ser
            340             345             350

Pro Arg Leu Val Arg Ala Ala Ala Leu Lys Leu Gly Gln Glu Leu Cys
        355             360             365

Gly Met Leu His Arg Pro Arg His Ala Thr Val Ser Arg Ser Leu Glu
    370             375             380
```

```
Gly Thr Glu Ala Gln Val Phe Lys Ala Lys Phe Lys Asn Trp Asp Asp
385             390             395             400

Val Leu Thr Val Asp Tyr Thr Arg Asn Ala Glu Ala Val Leu Gln Ser
            405             410             415

Pro Gly Leu Ser Gly Lys Val Lys Arg Asp Ala Glu Lys Lys Asp Gln
            420             425             430

Met Lys Ala Asp Leu Thr Ala Leu Phe Leu Pro Arg Gln Pro Pro Met
            435             440             445

Ser Leu Ala Glu Ala Xaa Gln Leu Met Glu Glu Trp Asn Glu Asp Leu
    450             455             460

Asp Gly Met Glu Gly Phe Val Leu Glu Gly Lys Lys Phe Ala Arg Leu
465             470             475             480

Pro Glu Glu Glu Phe Gly His Phe Tyr Thr Gln Asp Cys Tyr Val Phe
            485             490             495

Leu Cys Arg Tyr Trp Val Pro Val Glu Tyr Glu Glu Glu Glu Lys Lys
            500             505             510

Glu Asp Lys Glu Glu Lys Ala Glu Gly Lys Glu Gly Glu Glu Ala Thr
            515             520             525

Ala Glu Ala Glu Glu Lys Gln Pro Glu Glu Asp Phe Gln Cys Ile Val
    530             535             540

Tyr Phe Trp Gln Gly Arg Glu Ala Ser Asn Met Gly Trp Leu Thr Phe
545             550             555             560

Thr Phe Ser Leu Gln Lys Lys Phe Glu Ser Leu Phe Pro Gly Lys Leu
            565             570             575

Glu Val Val Arg Met Thr Gln Gln Glu Asn Pro Lys Phe Leu Ser
            580             585             590

His Phe Lys Arg Lys Phe Ile Ile His Arg Gly Lys Arg Lys Ala Val
            595             600             605

Gln Gly Ala Gln Gln Pro Ser Leu Tyr Gln Ile Arg Thr Asn Gly Ser
    610             615             620

Ala Leu Cys Thr Arg Cys Ile Gln Ile Asn Thr Asp Ser Ser Leu Leu
625             630             635             640

Asn Ser Glu Phe Cys Phe Ile Leu Lys Val Pro Phe Glu Ser Glu Asp
            645             650             655
```

```
Asn Gln Gly Ile Val Tyr Ala Trp Val Gly Arg Ala Ser Asp Pro Asp
        660             665             670

Glu Ala Lys Leu Ala Glu Asp Ile Leu Asn Thr Met Phe Asp Thr Ser
        675             680             685

Tyr Ser Lys Gln Val Ile Asn Glu Gly Glu Glu Pro Glu Asn Phe Phe
        690             695             700

Trp Val Gly Ile Gly Ala Gln Lys Pro Tyr Asp Asp Asp Ala Glu Tyr
705             710             715             720

Met Lys His Thr Arg Leu Phe Arg Cys Ser Asn Glu Lys Gly Tyr Phe
            725             730             735

Ala Val Thr Glu Lys Cys Ser Asp Phe Cys Gln Asp Asp Leu Ala Asp
            740             745             750

Asp Asp Ile Met Leu Leu Asp Asn Gly Gln Glu Val Tyr Met Trp Val
        755             760             765

Gly Thr Gln Thr Ser Gln Val Glu Ile Lys Leu Ser Leu Lys Ala Cys
770             775             780

Gln Val Tyr Ile Gln His Met Arg Ser Lys Glu His Glu Arg Pro Arg
785             790             795             800

Arg Leu Arg Leu Val Arg Lys Gly Asn Glu Gln His Ala Phe Thr Arg
            805             810             815

Cys Phe His Ala Trp Ser Ala Phe Cys Lys Ala Leu Ala
        820             825
```

```
<210> 603
<211> 221
<212> PRT
<213> Homo sapiens

<400> 603
Thr Glu Pro Pro Leu Ser Cys Cys Leu Pro Ala Thr Tyr Pro Ala Asp
 1           5               10              15

Met Gly Thr Ala Gly Ala Met Gln Leu Cys Trp Val Ile Leu Gly Phe
        20              25              30

Leu Leu Phe Arg Gly His Asn Ser Gln Pro Thr Met Thr Gln Thr Ser
        35              40              45
```

```
Ser Ser Gln Gly Gly Leu Gly Gly Leu Ser Leu Thr Thr Glu Pro Val
    50                  55              60

Ser Ser Asn Pro Gly Tyr Ile Pro Ser Ser Glu Ala Asn Arg Pro Ser
 65                  70              75                  80

His Leu Ser Ser Thr Gly Thr Pro Gly Ala Gly Val Pro Ser Ser Gly
            85                  90                  95

Arg Asp Gly Gly Thr Ser Arg Asp Thr Phe Gln Thr Val Pro Pro Asn
            100             105             110

Ser Thr Thr Met Ser Leu Ser Met Arg Glu Asp Ala Thr Ile Leu Pro
        115             120             125

Ser Pro Thr Ser Glu Thr Val Leu Thr Val Ala Ala Phe Gly Val Ile
    130             135             140

Ser Phe Ile Val Ile Leu Val Val Val Val Ile Ile Leu Val Gly Val
145             150             155             160

Val Ser Leu Arg Phe Lys Cys Arg Lys Ser Lys Glu Ser Glu Asp Pro
            165             170             175

Gln Lys Pro Gly Ser Ser Gly Leu Ser Glu Ser Cys Ser Thr Ala Asn
        180             185             190

Gly Glu Lys Asp Ser Ile Thr Leu Ile Ser Met Lys Asn Ile Asn Met
        195             200             205

Asn Asn Gly Lys Gln Ser Leu Ser Ala Glu Lys Val Leu
    210             215             220


<210> 604
<211> 97
<212> PRT
<213> Homo sapiens

<400> 604
Ser Cys Gly Leu Ser Leu Ile Lys Met Thr Thr Ser Gln Lys His Arg
 1               5               10              15

Asp Phe Val Ala Glu Pro Met Gly Glu Lys Pro Val Gly Ser Leu Ala
            20              25              30

Gly Ile Gly Glu Val Leu Gly Lys Lys Leu Glu Glu Arg Gly Phe Asp
        35              40              45

Lys Ala Tyr Val Val Leu Gly Gln Phe Leu Val Leu Lys Lys Asp Glu
```

```
            50                    55                    60
Asp Leu Phe Arg Glu Trp Leu Lys Asp Thr Cys Gly Ala Asn Ala Lys
 65                   70                   75                   80

Gln Ser Arg Asp Cys Phe Gly Cys Leu Arg Glu Trp Cys Asp Ala Phe
                 85                   90                   95

Leu
```

<210> 605
<211> 266
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 605

```
Gly Pro Arg Arg Leu Gly Ala Leu His Ala Ala Ala Thr Gly Ala Arg
  1               5                   10                  15

Cys Leu Val Glu Leu Leu Val Ala His Gly Ala Asp Leu Asn Ala Lys
                 20                  25                  30

Ser Leu Met Asp Glu Thr Pro Leu Asp Val Cys Gly Asp Glu Glu Val
             35                  40                  45

Arg Ala Lys Leu Leu Glu Leu Lys His Lys His Asp Ala Leu Leu Arg
         50                  55                  60

Ala Gln Ser Arg Gln Arg Ser Leu Leu Arg Arg Arg Thr Ser Ser Ala
 65                  70                  75                  80

Gly Ser Arg Xaa Lys Val Val Arg Arg Val Ser Leu Thr Gln Arg Thr
                 85                  90                  95

Asp Leu Tyr Arg Lys Gln His Ala Gln Glu Ala Ile Val Trp Gln Gln
            100                 105                 110

Pro Pro Pro Thr Ser Pro Glu Pro Glu Asp Asn Asp Asp Arg Gln
            115                 120                 125

Thr Gly Ala Glu Leu Arg Pro Pro Pro Glu Glu Asp Asn Pro Glu
            130                 135                 140
```

```
Val Val Arg Pro His Asn Gly Arg Val Gly Gly Ser Pro Val Arg His
145             150             155         160

Leu Tyr Ser Lys Arg Leu Asp Arg Ser Val Ser Tyr Gln Leu Ser Pro
            165         170             175

Leu Asp Ser Thr Thr Pro His Thr Leu Val His Asp Lys Ala His His
        180         185             190

Thr Leu Ala Asp Leu Lys Arg Gln Arg Ala Ala Ala Lys Leu Gln Arg
        195             200             205

Pro Pro Pro Glu Gly Pro Glu Ser Pro Glu Thr Ala Glu Pro Gly Leu
    210             215             220

Pro Gly Asp Thr Val Thr Pro Gln Pro Asp Cys Gly Phe Arg Ala Gly
225             230             235             240

Gly Asp Pro Pro Leu Leu Lys Leu Thr Ala Pro Ala Val Glu Ala Pro
            245             250             255

Val Glu Arg Arg Pro Cys Cys Leu Leu Met
            260             265
```

<220>
<210> 606
<211> 331
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (285)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 606
```
His Asp Ser Cys Phe Val Glu Met Gln Ala Gln Lys Val Met His Val
 1               5               10              15

Ser Ser Ala Glu Leu Asn Tyr Ser Leu Pro Tyr Asp Ser Lys His Gln
            20              25              30

Ile Arg Asn Ala Ser Asn Val Lys His His Asp Ser Ser Ala Leu Gly
        35              40              45
```

Val Tyr Ser Tyr Ile Pro Leu Val Glu Asn Pro Tyr Phe Ser Ser Trp
    50   55   60

Pro Pro Ser Gly Thr Ser Ser Lys Met Ser Leu Asp Leu Pro Glu Lys
 65   70   75   80

Gln Asp Gly Thr Val Phe Pro Ser Ser Leu Xaa Pro Thr Ser Ser Thr
            85   90   95

Ser Leu Phe Ser Tyr Tyr Asn Ser His Asp Ser Leu Ser Leu Asn Ser
        100   105   110

Pro Thr Asn Ile Ser Ser Leu Leu Asn Gln Glu Ser Ala Val Leu Ala
        115   120   125

Thr Ala Pro Arg Ile Asp Asp Glu Ile Pro Pro Pro Leu Pro Val Arg
    130   135   140

Thr Pro Glu Ser Phe Ile Val Val Glu Glu Ala Gly Glu Phe Ser Pro
145   150   155   160

Asn Val Pro Lys Ser Leu Ser Ser Ala Val Lys Val Lys Ile Gly Thr
        165   170   175

Ser Leu Glu Trp Gly Gly Thr Ser Glu Pro Lys Lys Phe Asp Asp Ser
        180   185   190

Val Ile Leu Arg Pro Ser Lys Ser Val Lys Leu Arg Ser Pro Lys Ser
        195   200   205

Glu Leu His Gln Asp Arg Ser Ser Pro Pro Pro Leu Pro Glu Arg
    210   215   220

Thr Leu Glu Ser Phe Phe Leu Ala Asp Glu Asp Cys Met Gln Ala Gln
225   230   235   240

Ser Ile Glu Thr Tyr Ser Thr Ser Tyr Pro Asp Thr Met Glu Asn Ser
        245   250   255

Thr Ser Ser Lys Gln Thr Leu Lys Thr Pro Gly Lys Ser Phe Thr Arg
        260   265   270

Ser Lys Ser Leu Lys Ile Leu Arg Asn Met Lys Lys Xaa Ile Cys Asn
        275   280   285

Ser Cys Pro Pro Asn Lys Pro Ala Glu Ser Val Gln Ser Asn Asn Ser
        290   295   300

Ser Ser Phe Leu Asn Phe Gly Phe Ala Asn Arg Phe Ser Lys Pro Lys
305   310   315   320

```
Gly Pro Arg Asn Pro Pro Pro Thr Trp Asn Ile
             325                 330
```

<210> 607
<211> 192
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 607
```
Ala Ala Pro Ser Glu Pro Lys Ala Arg Gly Gly His Gly Gly Ala Leu
  1           5               10                  15

Ala Arg Leu Glu Thr Met Pro Lys Leu Gln Gly Phe Glu Phe Trp Ser
           20                  25                  30

Arg Thr Leu Arg Gly Ala Arg His Val Val Ala Pro Met Val Asp Gln
        35                  40                  45

Ser Glu Leu Ala Trp Arg Leu Leu Ser Arg Arg His Gly Ala Gln Leu
     50                  55                  60

Cys Tyr Thr Pro Met Leu His Ala Gln Val Phe Val Arg Xaa Ala Asn
 65                  70                  75                  80

Tyr Arg Lys Glu Asn Leu Tyr Cys Glu Val Cys Pro Glu Asp Arg Pro
             85                  90                  95

Leu Ile Val Gln Phe Cys Ala Asn Asp Pro Glu Val Phe Val Gln Ala
                100                 105                 110

Ala Leu Leu Ala Gln Asp Tyr Cys Asp Ala Ile Asp Leu Asn Leu Gly
         115                 120                 125

Cys Pro Gln Met Ile Ala Lys Arg Gly His Tyr Gly Ala Phe Leu Gln
     130                 135                 140

Asp Glu Trp Asp Leu Leu Gln Arg Met Ile Leu Leu Ala His Glu Lys
145                 150                 155                 160

Leu Ser Val Pro Val Thr Cys Lys Ile Arg Val Phe Pro Glu Ile Asp
             165                 170                 175

Lys Thr Val Ser Thr Pro Arg Cys Trp Arg Arg Pro Ala Ala Ser Cys
             180                 185                 190
```

<210> 608
<211> 415
<212> PRT
<213> Homo sapiens

<400> 608
His Ile Lys Cys Pro His Ser Lys Tyr Gly Cys Thr Phe Ile Gly Asn
 1   5   10   15

Gln Asp Thr Tyr Glu Thr His Leu Glu Thr Cys Arg Phe Glu Gly Leu
            20   25   30

Lys Glu Phe Leu Gln Gln Thr Asp Asp Arg Phe His Glu Met His Val
        35   40   45

Ala Leu Ala Gln Lys Asp Gln Glu Ile Ala Phe Leu Arg Ser Met Leu
    50   55   60

Gly Lys Leu Ser Glu Lys Ile Asp Gln Leu Glu Lys Ser Leu Glu Leu
65   70   75   80

Lys Phe Asp Val Leu Asp Glu Asn Gln Ser Lys Leu Ser Glu Asp Leu
                85   90   95

Met Glu Phe Arg Arg Asp Ala Ser Met Leu Asn Asp Glu Leu Ser His
            100   105   110

Ile Asn Ala Arg Leu Asn Met Gly Ile Leu Gly Ser Tyr Asp Pro Gln
        115   120   125

Gln Ile Phe Lys Cys Lys Gly Thr Phe Val Gly His Gln Gly Pro Val
    130   135   140

Trp Cys Leu Cys Val Tyr Ser Met Gly Asp Leu Leu Phe Ser Gly Ser
145   150   155   160

Ser Asp Lys Thr Ile Lys Val Trp Asp Thr Cys Thr Thr Tyr Lys Cys
                165   170   175

Gln Lys Thr Leu Glu Gly His Asp Gly Ile Val Leu Ala Leu Cys Ile
            180   185   190

Gln Gly Cys Lys Leu Tyr Ser Gly Ser Ala Asp Cys Thr Ile Ile Val
            195   200   205

```
Trp Asp Ile Gln Asn Leu Gln Lys Val Asn Thr Ile Arg Ala His Asp
    210             215             220

Asn Pro Val Cys Thr Leu Val Ser Ser His Asn Val Leu Phe Ser Gly
225             230             235             240

Ser Leu Lys Ala Ile Lys Val Trp Asp Ile Val Gly Thr Glu Leu Lys
            245             250             255

Leu Lys Lys Glu Leu Thr Gly Leu Asn His Trp Val Arg Ala Leu Val
            260             265             270

Ala Ala Gln Ser Tyr Leu Tyr Ser Gly Ser Tyr Gln Thr Ile Lys Ile
        275             280             285

Trp Asp Ile Arg Thr Leu Asp Cys Ile His Val Leu Gln Thr Ser Gly
    290             295             300

Gly Ser Val Tyr Ser Ile Ala Val Thr Asn His His Ile Val Cys Gly
305             310             315             320

Thr Tyr Glu Asn Leu Ile His Val Trp Asp Ile Glu Ser Lys Glu Gln
            325             330             335

Val Arg Thr Leu Thr Gly His Val Gly Thr Val Tyr Ala Leu Ala Val
        340             345             350

Ile Ser Thr Pro Asp Gln Thr Lys Val Phe Ser Ala Ser Tyr Asp Arg
        355             360             365

Ser Leu Arg Val Trp Ser Met Asp Asn Met Ile Cys Thr Gln Thr Leu
    370             375             380

Leu Arg His Gln Gly Ser Val Thr Ala Leu Ala Val Ser Arg Gly Arg
385             390             395             400

Leu Phe Ser Gly Ala Val Asp Ser Thr Val Lys Val Trp Thr Cys
            405             410             415
```

```
<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 609
Phe Ser Glu Leu Asn Gln Cys Phe Tyr Ile Cys Phe Phe Phe Tyr Ala
 1               5                  10                  15

Ser Trp Lys Trp Arg Met Lys Ile Gln Leu Xaa Cys Ser Asn Ser Arg
            20                  25                  30

Arg Xaa Val Ser Thr Glu Lys Gly Thr Cys Phe Phe Thr Pro Glu Leu
        35                  40                  45
```

```
<210> 610
<211> 241
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 610
```

Xaa Asp Xaa Gly Arg Pro Xaa Arg Thr Ala Glu Ser Xaa Phe Gly Ile
 1   5   10   15

Asn Leu Lys Gly Pro Lys Ile Lys Gly Gly Ala Asp Val Ser Gly Gly
            20   25   30

Val Ser Ala Pro Xaa Ile Ser Leu Gly Glu Gly His Leu Ser Val Lys
        35   40   45

Gly Ser Gly Gly Glu Trp Lys Gly Pro Gln Val Ser Ser Ala Leu Asn
    50   55   60

Leu Asp Thr Ser Lys Phe Ala Gly Gly Leu His Phe Ser Gly Pro Lys
65   70   75   80

Val Glu Gly Gly Val Lys Gly Gly Gln Ile Gly Leu Gln Ala Pro Gly
            85   90   95

Leu Ser Val Ser Gly Pro Gln Gly His Leu Glu Ser Gly Ser Gly Lys
        100   105   110

Val Thr Phe Pro Lys Met Lys Ile Pro Lys Phe Thr Phe Ser Gly Arg
        115   120   125

Glu Leu Val Gly Arg Glu Met Gly Val Asp Val His Phe Pro Lys Ala
    130   135   140

Glu Ala Ser Ile Gln Ala Gly Ala Gly Asp Gly Glu Trp Glu Glu Ser
145   150   155   160

Glu Val Lys Leu Lys Lys Ser Lys Ile Lys Met Pro Lys Phe Asn Phe
            165   170   175

Ser Lys Pro Lys Gly Lys Gly Gly Val Thr Gly Ser Pro Glu Ala Ser
            180   185   190

Ile Ser Gly Ser Lys Gly Asp Leu Lys Ser Ser Lys Ala Ser Leu Gly
        195   200   205

Ser Leu Glu Gly Glu Ala Glu Ala Glu Ala Ser Ser Pro Lys Gly Lys
    210   215   220

Phe Ser Leu Phe Lys Ser Lys Lys Pro Arg His Arg Cys Lys Phe Ile
225   230   235   240

Gln

<210> 611

<211> 77
<212> PRT
<213> Homo sapiens

<400> 611
His Tyr Arg Arg Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser
 1   5   10   15

Thr His Ala Ser Gly Val Ala Asp Gly Gly Gln Val Phe Leu Phe Pro
            20   25   30

Glu Thr Gly Ser Val Gln Thr Ala Asn Ala His Arg Trp Pro Arg Gly
            35   40   45

Gly Gly Ser Gln Gly Val Trp Val Phe Leu Gly Phe Phe Ser Val Val
        50   55   60

Ser Phe Thr Gln Gly Trp Trp Ser Gln Pro Val Trp Cys
65   70   75

<210> 612
<211> 137
<212> PRT
<213> Homo sapiens

<400> 612
Leu Gln Val Pro Val Arg Asn Ser Gly Ser Pro Thr Arg Gln Ala Ala
 1   5   10   15

Ala Met Thr Phe Cys Arg Leu Leu Asn Arg Cys Gly Glu Ala Ala Arg
            20   25   30

Ser Leu Pro Leu Gly Ala Arg Cys Phe Gly Val Arg Val Ser Pro Thr
            35   40   45

Gly Glu Lys Val Thr His Thr Gly Gln Val Tyr Asp Asp Lys Asp Tyr
        50   55   60

Arg Arg Ile Arg Phe Val Gly Arg Gln Lys Glu Val Asn Glu Asn Phe
65   70   75   80

Ala Ile Asp Leu Ile Ala Glu Gln Pro Val Ser Glu Val Glu Thr Arg
                85   90   95

Val Ile Ala Cys Asp Gly Gly Gly Gly Ala Leu Gly His Pro Lys Val
                100   105   110

Tyr Ile Asn Leu Asp Lys Glu Thr Lys Thr Gly Thr Cys Gly Tyr Cys
            115   120   125

```
Gly Leu Gln Phe Arg Gln His His His
    130                 135


<210> 613
<211> 122
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<400> 613
Tyr Ser Thr Asp Asn Asn Asn Asn Trp Tyr Ser Ile Phe Tyr Leu His
 1   5   10   15

Ser Ser Phe Leu Gly Glu Asn Ala Glu Lys Leu Leu Gln Phe Lys Arg
             20   25   30

Trp Phe Trp Ser Ile Val Glu Lys Met Ser Met Thr Glu Arg Gln Asp
         35   40   45

Leu Xaa Tyr Phe Trp Thr Ser Ser Pro Ser Leu Pro Ala Ser Glu Glu
    50   55   60

Gly Phe Gln Pro Met Pro Ser Ile Thr Ile Xaa Pro Pro Asp Asp Xaa
65   70   75   80

His Leu Pro Thr Xaa Lys Tyr Leu His Phe Leu Asp Phe Thr Phe Pro
                85   90   95

Leu Xaa Ser Phe Lys Gln Asp Ser Xaa Asn Arg Lys Leu Val Xaa Ser
        100   105   110

Pro Phe Arg Xaa Gln Lys Phe Trp Val Leu
    115   120

<210> 614
<211> 62
<212> PRT
<213> Homo sapiens

<400> 614
Phe Phe Ile Gly Leu Glu Thr Arg Ala Asn Ser Ile Met Phe Ser Lys
 1   5   10   15

Glu Thr Asp Leu Ser Cys Trp Ile Arg Gly Thr Asn Pro Thr Tyr Met
             20   25   30

Ile Phe Phe Leu Phe Leu Ser Cys Ser Tyr Gly Thr Val Leu Phe Gly
         35   40   45

Thr Phe Ala Thr Arg Asp Asn Thr Thr Phe Leu Thr Leu Ile
    50   55   60

<210> 615
<211> 159
<212> PRT
<213> Homo sapiens

<400> 615
Val Gly Leu Pro Asn Met Ala Gln Ser Ile Asn Ile Thr Glu Leu Asn
 1   5   10   15

Leu Pro Gln Leu Glu Met Leu Lys Asn Gln Leu Asp Gln Glu Val Glu
            20   25   30

Phe Leu Ser Thr Ser Ile Ala Gln Leu Lys Val Val Gln Thr Lys Tyr
        35   40   45

Val Glu Ala Lys Asp Cys Leu Asn Val Leu Asn Lys Ser Asn Glu Gly
        50   55   60

Lys Glu Leu Leu Val Pro Leu Thr Ser Ser Met Tyr Val Pro Gly Lys
65   70   75   80

Leu His Asp Val Glu His Val Leu Ile Asp Val Gly Thr Gly Tyr Tyr
                85   90   95

Val Glu Lys Thr Ala Glu Asp Ala Lys Asp Phe Phe Lys Arg Lys Ile
            100   105   110

Asp Phe Leu Thr Lys Gln Met Glu Lys Ile Gln Pro Ala Leu Gln Glu
        115   120   125

Lys His Ala Met Lys Gln Ala Val Met Glu Met Met Ser Gln Lys Ile
        130   135   140

Gln Gln Leu Thr Ala Leu Gly Ala Ala Gln Ala Thr Ala Lys Ala
145   150   155

<210> 616
<211> 93
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 616
Lys Val Ala Cys Arg Tyr Arg Xaa Gly Ile Pro Gly Arg Pro Thr Arg
 1   5   10   15

Pro Gly Thr Gln Asp Ala Glu Gly Lys Lys Ala Lys Gly Lys Lys Val
            20   25   30

```
Ala Pro Ala Pro Ala Val Val Lys Lys Gln Glu Ala Lys Lys Val Val
        35              40              45

Asn Pro Leu Phe Glu Lys Arg Pro Lys Asn Phe Gly Ile Gly Gln Asp
    50              55              60

Ile Gln Pro Lys Arg Asp Leu Thr Arg Phe Val Lys Trp Pro Arg Tyr
65              70              75              80

Ile Arg Leu Gln Arg His Ala Arg Ser Ser Thr Ser Gly
            85              90
```

<210> 617
<211> 362
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (307)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 617
```
Ser Arg Val Asp Pro Arg Val Arg Arg Gly Val Pro Tyr Gln Leu Gly
  1             5              10              15

Pro His Gly His Arg Gln Gly Leu Glu Ala Pro Leu Tyr Leu Thr Pro
            20              25              30

Glu Gly Trp Ser Leu Phe Leu Gln Arg Tyr Tyr Gln Val Val His Glu
        35              40              45

Gly Ala Glu Leu Arg His Leu Asp Thr Gln Val Gln Arg Cys Glu Asp
    50              55              60

Ile Leu Gln Gln Leu Gln Ala Val Val Pro Gln Ile Asp Met Glu Gly
65              70              75              80

Asp Arg Asn Ile Trp Ile Val Lys Pro Gly Ala Lys Ser Arg Gly Arg
            85              90              95

Gly Ile Met Cys Met Asp His Leu Glu Glu Met Leu Lys Leu Val Asn
            100             105             110

Gly Asn Pro Val Val Met Lys Asp Gly Lys Trp Val Val Gln Lys Tyr
        115             120             125

Ile Glu Arg Pro Leu Leu Ile Phe Gly Thr Lys Phe Asp Leu Arg Gln
    130             135             140
```

Trp Phe Leu Val Thr Asp Trp Asn Pro Leu Thr Val Trp Phe Tyr Arg
145   150   155   160

Asp Ser Tyr Ile Arg Phe Ser Thr Gln Pro Phe Ser Leu Lys Asn Leu
                165   170   175

Asp Asn Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu
                180   185   190

Asn Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser
        195   200   205

Ser Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala
        210   215   220

Trp Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala
225   230   235   240

Leu Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu
                245   250   255

Leu Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu
                260   265   270

Ile Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr
        275   280   285

Ala Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile
        290   295   300

Asp Arg Xaa Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile
305   310   315   320

Tyr Lys Gln Pro Ala Val Glu Val Pro Gln Tyr Val Gly Ile Arg Leu
                325   330   335

Leu Val Glu Gly Phe Thr Ile Lys Lys Pro Met Ala Met Cys His Arg
                340   345   350

Arg Met Gly Val Arg Gln Gln Ser Leu Cys
        355   360

<210> 618
<211> 328
<212> PRT
<213> Homo sapiens

<400> 618

```
Ile Arg Met Arg Glu Trp Trp Val Gln Val Gly Leu Leu Ala Val Pro
 1               5               10              15

Leu Leu Ala Ala Tyr Leu His Ile Pro Pro Pro Gln Leu Ser Pro Ala
            20              25              30

Leu His Ser Trp Lys Ser Ser Gly Lys Phe Phe Thr Tyr Lys Gly Leu
        35              40              45

Arg Ile Phe Tyr Gln Asp Ser Val Gly Val Val Gly Ser Pro Glu Ile
    50              55              60

Val Val Leu Leu His Gly Phe Pro Thr Ser Ser Tyr Asp Trp Tyr Lys
65              70              75              80

Ile Trp Glu Gly Leu Thr Leu Arg Phe His Arg Val Ile Ala Leu Asp
            85              90              95

Phe Leu Gly Phe Gly Phe Ser Asp Lys Pro Arg Pro His His Tyr Ser
            100             105             110

Ile Phe Glu Gln Ala Ser Ile Val Glu Ala Leu Leu Arg His Leu Gly
        115             120             125

Leu Gln Asn Arg Arg Ile Asn Leu Leu Ser His Asp Tyr Gly Asp Ile
    130             135             140

Val Ala Gln Glu Leu Leu Tyr Arg Tyr Lys Gln Asn Arg Ser Gly Arg
145             150             155             160

Leu Thr Ile Lys Ser Leu Cys Leu Ser Asn Gly Gly Ile Phe Pro Glu
            165             170             175

Thr His Arg Pro Leu Leu Leu Gln Lys Leu Leu Lys Asp Gly Gly Val
            180             185             190

Leu Ser Pro Ile Leu Thr Arg Leu Met Asn Phe Phe Val Phe Ser Arg
        195             200             205

Gly Leu Thr Pro Val Phe Gly Pro Tyr Thr Arg Pro Ser Glu Ser Glu
    210             215             220

Leu Trp Asp Met Trp Ala Gly Ile Arg Asn Asn Asp Gly Asn Leu Val
225             230             235             240

Ile Asp Ser Leu Leu Gln Tyr Ile Asn Gln Arg Lys Lys Phe Arg Arg
            245             250             255

Arg Trp Val Gly Ala Leu Ala Ser Val Thr Ile Pro Ile His Phe Ile
            260             265             270
```

```
Tyr Gly Pro Leu Asp Pro Val Asn Pro Tyr Pro Glu Phe Leu Glu Leu
        275             280             285

Tyr Arg Lys Thr Leu Pro Arg Ser Thr Val Ser Ile Leu Asp Asp His
    290             295             300

Ile Ser His Tyr Pro Gln Leu Glu Asp Pro Met Gly Phe Leu Asn Ala
305             310             315             320

Tyr Met Gly Phe Ile Asn Ser Phe
            325
```

```
<210> 619
<211> 271
<212> PRT
<213> Homo sapiens

<400> 619
Asn Met Asp Pro Pro Gly Leu Gln Gly Val Gln Gly Thr Val Ala Ala
  1             5               10              15

Cys Gly Ala Cys Tyr Trp Leu Leu Gly Leu Met Ala Val Arg Ala Ser
            20              25              30

Phe Glu Asn Asn Cys Glu Ile Gly Cys Phe Ala Lys Leu Thr Asn Thr
        35              40              45

Tyr Cys Leu Val Ala Ile Gly Gly Ser Glu Asn Phe Tyr Ser Val Phe
    50              55              60

Glu Gly Glu Leu Ser Asp Thr Ile Pro Val Val His Ala Ser Ile Ala
65              70              75              80

Gly Cys Arg Ile Ile Gly Arg Met Cys Val Gly Asn Arg His Gly Leu
            85              90              95

Leu Val Pro Asn Asn Thr Thr Asp Gln Glu Leu Gln His Ile Arg Asn
            100             105             110

Ser Leu Pro Asp Thr Val Gln Ile Arg Arg Val Glu Glu Arg Leu Ser
        115             120             125

Ala Leu Gly Asn Val Thr Thr Cys Asn Asp Tyr Val Ala Leu Val His
        130             135             140

Pro Asp Leu Asp Arg Glu Thr Glu Glu Ile Leu Ala Asp Val Leu Lys
145             150             155             160

Val Glu Val Phe Arg Gln Thr Val Ala Asp Gln Val Leu Val Gly Ser
```

```
                        165                  170                  175
        Tyr Cys Val Phe Ser Asn Gln Gly Gly Leu Val His Pro Lys Thr Ser
                    180                  185                  190
        Ile Glu Asp Gln Asp Glu Leu Ser Ser Leu Leu Gln Val Pro Leu Val
                    195                  200                  205
        Ala Gly Thr Val Asn Arg Gly Ser Glu Val Ile Ala Ala Gly Met Val
                    210                  215                  220
        Val Asn Asp Trp Cys Ala Phe Cys Gly Leu Asp Thr Thr Ser Thr Glu
        225                  230                  235                  240
        Leu Ser Val Val Glu Ser Val Phe Lys Leu Asn Glu Ala Gln Pro Ser
                        245                  250                  255
        Thr Ile Ala Thr Ser Met Arg Asp Ser Leu Ile Asp Ser Leu Thr
                    260                  265                  270
```

```
<210> 620
<211> 88
<212> PRT
<213> Homo sapiens

<400> 620
Gly Ser Ala Ala Met Lys Val Lys Ile Lys Cys Trp Asn Gly Val Ala
 1               5                   10                  15
Thr Trp Leu Trp Val Ala Asn Asp Glu Asn Cys Gly Ile Cys Arg Met
            20                  25                  30
Ala Phe Asn Gly Cys Cys Pro Asp Cys Lys Val Pro Gly Asp Asp Cys
            35                  40                  45
Pro Leu Val Trp Gly Gln Cys Ser His Cys Phe His Met His Cys Ile
        50                  55                  60
Leu Lys Trp Leu His Ala Gln Gln Val Gln Gln His Cys Pro Met Cys
65                  70                  75                  80
Arg Gln Glu Trp Lys Phe Lys Glu
                85
```

```
<210> 621
<211> 46
<212> PRT
```

<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 621
Ala Gly Thr Ser Arg Ser Glu Gly Lys Arg Ser Ser Val Leu Thr Arg
 1   5   10   15

Thr Glu Phe Gln Ile Glu Met Phe Gln Thr Ile Glu Gly Glu Lys Trp
            20   25   30

Pro Gly Xaa Ser Ile Asn Leu Ser Xaa Phe His Gly Cys Phe
            35   40   45

<210> 622
<211> 103
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 622
Gly Arg Pro Thr Arg Pro Arg Gly Arg Gly Arg Ser Ser Ala Cys Leu
 1   5   10   15

Leu Leu Glu Gly Asp Gly Pro Ala Arg Leu Trp Ala Pro Thr Ser Pro
            20   25   30

Gly Val Xaa Xaa Glu Arg Phe Ala Glu Glu Arg Gly Ser Gly Arg Ala
            35   40   45

Leu Asn Ala Gly Pro Lys His Pro Gly Ser Leu His Ser Pro Arg Pro
       50   55   60

```
Gln Thr Leu Thr Lys Thr Trp Ile Cys Ser Arg Phe Ser Cys Ser Arg
65                70                75                80

Ser Ser Arg Ser Cys Pro Arg Leu Leu Arg Leu Arg Ala Glu Lys Lys
             85              90              95

Val Cys Gln Ala Trp Thr Gln
         100
```

<210> 623
<211> 103
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring-L-amino acids

<400> 623

```
Gly Arg Pro Thr Arg Pro Thr Ser Ser Arg Ser Arg Ala Ala Arg Pro
 1           5              10              15

Phe Phe Phe Phe Phe Phe Phe Trp Phe Pro Glu Phe Gly Phe Ile Leu
             20              25              30

Gln Tyr Arg Asn His Leu Glu Pro Ser Glu Thr Asp Ile Pro Glu Ala
         35              40              45

Glu Ala Leu Ser Asn Gln Tyr Cys Val Ala Leu Xaa Pro Leu Arg Lys
     50              55              60

Pro His Leu Gly Tyr Lys Arg Ser Phe Tyr Val Tyr Pro Leu Tyr His
 65              70              75              80

Gly Phe Leu Ser Pro Leu Leu Leu Pro Ile Leu Pro Gly Glu Asn Thr
             85              90              95

Ala Gln Arg Leu Pro Ser Glu
         100
```

<210> 624
<211> 305
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (219)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 624
Thr Gln Asp Leu Trp Met Ser Cys Pro Val Gln Thr Met Asp Pro Glu
 1               5                   10                  15


Val Thr Leu Leu Leu Gln Cys Pro Gly Gly Gly Leu Pro Gln Glu Gln
            20                  25                  30


Ile Gln Ala Glu Leu Ser Pro Ala His Asp Arg Arg Pro Leu Pro Gly
        35                  40                  45


Gly Asp Glu Ala Ile Thr Ala Ile Trp Glu Thr Arg Leu Lys Ala Gln
    50                  55                  60


Pro Trp Leu Phe Asp Ala Pro Lys Phe Arg Leu His Ser Ala Thr Leu
65                  70                  75                  80


Ala Pro Ile Gly Ser Arg Gly Pro Gln Leu Leu Leu Arg Leu Gly Leu
                85                  90                  95


Thr Ser Tyr Arg Asp Phe Leu Gly Thr Asn Trp Ser Ser Ser Ala Ala
            100                 105                 110


Trp Leu Arg Xaa Xaa Gly Ala Thr Asp Trp Gly Asp Thr Gln Ala Tyr
            115                 120                 125


Leu Ala Asp Pro Leu Gly Val Gly Ala Ala Leu Ala Thr Ala Asp Asp
    130                 135                 140


Phe Leu Val Phe Leu Arg Arg Ser Arg Gln Val Ala Glu Ala Pro Gly
145                 150                 155                 160


Leu Val Asp Val Pro Gly Gly His Pro Glu Pro Gln Ala Leu Cys Pro
                165                 170                 175


Gly Gly Ser Pro Gln His Gln Asp Leu Ala Gly Gln Leu Val Val His
            180                 185                 190
```

```
Glu Leu Phe Ser Ser Val Leu Gln Glu Ile Cys Asp Glu Val Asn Leu
        195             200             205

Pro Leu Leu Thr Leu Ser Gln Pro Leu Leu Xaa Gly Ile Ala Arg Asn
    210             215             220

Glu Thr Ser Ala Gly Arg Ala Ser Ala Glu Phe Tyr Val Gln Cys Ser
225             230             235             240

Leu Thr Ser Glu Gln Val Arg Lys His Tyr Leu Ser Gly Gly Pro Glu
            245             250             255

Ala His Glu Ser Thr Gly Ile Phe Phe Val Glu Thr Gln Asn Val Arg
            260             265             270

Arg Leu Pro Glu Thr Glu Met Trp Ala Glu Leu Cys Pro Ser Pro Lys
        275             280             285

Ala Pro Ser Ser Ser Thr Thr Gly Phe Arg Glu Val Pro Leu Glu Arg
    290             295             300

Pro
305
```

```
<210> 625
<211> 102
<212> PRT
<213> Homo sapiens

<400> 625
Ser Ala Met Lys Ala Ser Gly Thr Leu Arg Glu Tyr Lys Val Val Gly
  1           5               10              15

Arg Cys Leu Pro Thr Pro Lys Cys Arg Thr Pro Pro Leu Tyr Arg Met
            20              25              30

Arg Ile Phe Ala Pro Asn His Val Val Ala Lys Ser Arg Phe Trp Tyr
        35              40              45

Phe Val Ser Gln Leu Lys Lys Met Lys Lys Ser Ser Gly Glu Ile Val
    50              55              60

Tyr Cys Gly Gln Val Phe Glu Lys Ser Pro Leu Arg Val Lys Asn Phe
65              70              75              80

Gly Ile Trp Leu Arg Tyr Asp Ser Arg Ser Gly Thr His Asn Met Tyr
            85              90              95
```

585

Arg Gly Val Pro Gly Thr
　　　　　　　100

<210> 626
<211> 59
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 626
Ala Leu Trp Val Lys Ala Trp Arg Gln Glu Ser Glu Gly Gln Phe Gln
　1　　　　　　　　5　　　　　　　　　10　　　　　　　　　15

Glu Thr Gln Phe Ile Asn Phe His Gln His Leu Pro Gly Pro Cys Leu
　　　　　　　20　　　　　　　　　25　　　　　　　　　30

Gly Thr Glu Xaa Pro Ser Pro Glu Ser Gly His His Phe Pro Phe Gln
　　　　35　　　　　　　　　40　　　　　　　　　45

Ser Ile Glu Cys Arg Gly Ile Gln Gly Met Gly
　　50　　　　　　　　　55

<210> 627
<211> 220
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 627
Arg Leu Val Val Thr Glu Glu Asp Gly Gly Ala Arg Pro Glu Ala Leu
　1　　　　　　　　5　　　　　　　　　10　　　　　　　　　15

Gly Lys Ile Ala Pro Arg Thr Pro Ala Glu Leu Gly Ala Arg Ala Asp
　　　　　　　20　　　　　　　　　25　　　　　　　　　30

Gln Glu Leu Val Thr Ala Leu Met Cys Asp Leu Arg Arg Pro Ala Ala
　　　　35　　　　　　　　　40　　　　　　　　　45

Gly Gly Met Met Asp Leu Ala Tyr Val Cys Glu Trp Glu Lys Trp Ser

```
            50                    55                    60

    Lys Ser Thr His Cys Pro Ser Val Pro Leu Ala Cys Ala Trp Ser Cys
     65                    70                    75                    80

    Arg Asn Leu Ile Ala Phe Thr Met Asp Leu Arg Thr Xaa Asp Gln Asp
                       85                    90                    95

    Leu Thr Arg Met Ile His Ile Leu Asp Thr Glu His Pro Trp Asp Leu
                      100                   105                   110

    His Ser Ile Pro Ser Glu His His Glu Ala Ile Thr Cys Leu Glu Trp
                      115                   120                   125

    Asp Gln Ser Gly Ser Arg Leu Leu Ser Ala Asp Ala Asp Gly Gln Ile
                 130                   135                   140

    Lys Cys Trp Ser Met Ala Asp His Leu Ala Asn Ser Trp Glu Ser Ser
    145                   150                   155                   160

    Val Gly Ser Leu Val Glu Gly Asp Pro Ile Val Ala Leu Ser Trp Leu
                      165                   170                   175

    His Asn Gly Val Lys Leu Ala Leu His Val Glu Lys Ser Gly Ala Ser
                 180                   185                   190

    Ser Phe Gly Glu Lys Phe Ser Arg Val Lys Phe Ser Pro Val Leu Thr
                 195                   200                   205

    Leu Phe Gly Gly Lys Pro Trp Arg Ala Gly Ser Arg
         210                   215                   220
```

<210> 628
<211> 119
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 628
Pro Ala Ser Val Glu Val Tyr His Asp Ser Leu Cys Arg Lys Ile Trp

587

```
    1                . 5                    10                   15

 Arg Glu Asp Asp Lys Trp His Val Ile Phe Arg Ala Asp Gly Trp Glu
               20                   25                    30

 Gln His Ile Thr Ala Arg Tyr Leu Val Gly Ala Asp Gly Ala Asn Ser
          35                   40                   45

 Met Val Arg Arg His Leu Tyr Pro Asp His Gln Ile Arg Lys Tyr Val
       50                   55                   60

 Ala Ile Gln Gln Trp Phe Ala Glu Lys His Pro Val Pro Phe Tyr Ser
   65                   70                   75                   80

 Cys Ile Phe Asp Asn Ser Ile Thr Asn Cys Tyr Ser Trp Ser Ile Ser
                85                   90                   95

 Lys Asp Gly Tyr Phe Ile Phe Gly Gly Ala Tyr Pro Met Glu Arg Arg
             100                  105                  110

 Ser Asp Xaa Phe Xaa Asp Ala
          115
```

```
<210> 629
<211> 39
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 629
Phe Gly Glu Pro Ser Leu Thr Val Arg Ala Asp Ile Thr Gly Arg Tyr
  1               5                    10                   15

Ser Ile Val Ser Met Leu Thr Thr Cys Arg Tyr Ser Leu Xaa Xaa His
            20                   25                   30

Met Lys Lys Val Ser Ser Cys
          35
```

588

```
<210> 630
<211> 267
<212> PRT
<213> Homo sapiens

<400> 630
Ser Ala Ala Leu Pro Gln Pro Thr Pro Pro Leu Thr Leu Pro Gln Ser
  1               5                  10                  15

Met Val Asn Thr Lys Pro Glu Lys Thr Glu Glu Asp Ser Glu Glu Val
             20                  25                  30

Arg Glu Gln Lys His Lys Thr Phe Val Glu Lys Tyr Glu Lys Gln Ile
         35                  40                  45

Lys His Phe Gly Met Leu Arg Arg Trp Asp Asp Ser Gln Lys Tyr Leu
     50                  55                  60

Ser Asp Asn Val His Leu Val Cys Glu Glu Thr Ala Asn Tyr Leu Val
 65                  70                  75                  80

Ile Trp Cys Ile Asp Leu Glu Val Glu Glu Lys Cys Ala Leu Met Glu
                 85                  90                  95

Gln Val Ala His Gln Thr Ile Val Met Gln Phe Ile Leu Glu Leu Ala
            100                 105                 110

Lys Ser Leu Lys Val Asp Pro Arg Ala Cys Phe Arg Gln Phe Phe Thr
         115                 120                 125

Lys Ile Lys Thr Ala Asp Arg Gln Tyr Met Glu Gly Phe Asn Asp Glu
     130                 135                 140

Leu Glu Ala Phe Lys Glu Arg Val Arg Gly Arg Ala Lys Leu Arg Ile
145                 150                 155                 160

Glu Lys Ala Met Lys Glu Tyr Glu Glu Glu Glu Arg Lys Lys Arg Leu
                165                 170                 175

Gly Pro Gly Gly Leu Asp Pro Val Glu Val Tyr Glu Ser Leu Pro Glu
            180                 185                 190

Glu Leu Gln Lys Cys Phe Asp Val Lys Asp Val Gln Met Leu Gln Asp
         195                 200                 205

Ala Ile Ser Lys Met Asp Pro Thr Asp Ala Lys Tyr His Met Gln Arg
     210                 215                 220

Cys Ile Asp Ser Gly Leu Trp Val Pro Asn Ser Lys Ala Ser Glu Ala
 225                 230                 235                 240
```

```
Lys Glu Gly Glu Glu Ala Gly Pro Gly Asp Pro Leu Leu Glu Ala Val
            245                 250                 255

Pro Lys Thr Gly Asp Glu Lys Asp Val Ser Val
            260                 265
```

```
<210> 631
<211> 207
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (164)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 631
Pro Thr Gly Thr Gly Ser Gly Val Pro Gly Leu Gly Arg Asn Gly Gly
 1               5                 10                 15

Arg Glu Gly Ala Pro Gly Thr Met Gly Leu Leu Thr Ile Leu Lys Lys
            20                 25                 30

Met Lys Gln Lys Glu Arg Glu Leu Arg Leu Leu Met Leu Gly Leu Asp
            35                 40                 45

Asn Ala Gly Lys Thr Thr Ile Leu Lys Lys Phe Asn Gly Glu Asp Ile
     50                 55                 60

Asp Thr Ile Ser Pro Thr Leu Gly Phe Asn Ile Lys Thr Leu Glu His
 65               70                 75                 80

Arg Gly Phe Lys Leu Asn Ile Trp Asp Val Gly Gly Gln Lys Ser Leu
            85                 90                 95

Arg Ser Tyr Trp Arg Asn Tyr Phe Glu Ser Thr Asp Gly Leu Ile Trp
            100                105                110

Val Val Asp Ser Ala Asp Arg Gln Arg Met Gln Asp Cys Gln Arg Glu
            115                120                125

Leu Gln Ser Leu Leu Val Glu Glu Arg Leu Ala Gly Ala Thr Leu Leu
            130                135                140

Ile Phe Ala Asn Lys Gln Asp Leu Pro Gly Ala Leu Ser Ser Asn Ala
145                150                155                160

Ile Arg Glu Xaa Leu Glu Leu Asp Ser Ile Arg Ser His His Trp Cys
```

```
                    165                 170                 175
     Ile Gln Gly Cys Ser Ala Val Thr Gly Glu Asn Leu Leu Pro Gly Ile
                   180                 185                 190

     Asp Trp Leu Leu Asp Asp Ile Ser Ser Arg Ile Phe Thr Ala Asp
                 195                 200                 205
```

<210> 632
<211> 79
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 632

```
     Lys Asn Asn Lys Lys Asp Gln Gln Asn Gly Ile Cys Ser His Thr Met
       1               5                  10                  15

     Ile Lys Thr Tyr Leu Arg Thr Ala Leu Phe Met Gly Lys Arg Ser Leu
                  20                  25                  30

     Ile Asp Ser Gln Phe His Arg Leu Tyr Arg Arg His Gly Leu Gly Arg
                 35                  40                  45

     Pro Gln Gly Asn Leu Xaa Ser Met Val Glu Gly Xaa Xaa Gly Ser Met
         50                  55                  60

     His His Leu His Trp Pro Glu Gln Xaa Glu Arg Glu Gln Ile Trp
       65                  70                  75
```

```
<210> 633
<211> 293
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (249)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (282)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 633
Trp Ser Pro Ser Pro Pro Ala Thr Pro Glu Gln Gly Leu Ser Ala Phe
 1               5                  10                  15

Tyr Leu Ser Tyr Phe Asp Met Leu Tyr Pro Glu Asp Ser Ser Trp Ala
            20                  25                  30

Ala Lys Ala Pro Gly Ala Ser Ser Arg Glu Glu Pro Pro Glu Glu Pro
        35                  40                  45

Glu Gln Cys Pro Val Ile Asp Ser Gln Ala Pro Ala Gly Ser Leu Asp
        50                  55                  60

Leu Val Pro Gly Gly Leu Thr Leu Glu Glu His Ser Leu Glu Gln Val
65                  70                  75                  80

Gln Ser Met Val Val Gly Glu Val Leu Lys Asp Ile Glu Thr Ala Cys
                85                  90                  95

Lys Leu Leu Asn Ile Thr Ala Asp Pro Met Asp Trp Ser Pro Ser Asn
            100                 105                 110

Val Gln Lys Trp Leu Leu Trp Thr Glu His Gln Tyr Arg Leu Pro Pro
        115                 120                 125

Met Gly Lys Ala Phe Gln Glu Leu Ala Gly Lys Glu Leu Cys Ala Met
        130                 135                 140

Ser Glu Glu Gln Phe Arg Gln Arg Ser Pro Leu Gly Gly Asp Val Leu
145                 150                 155                 160

His Ala His Leu Asp Ile Trp Lys Ser Ala Ala Trp Met Lys Glu Arg
            165                 170                 175
```

```
Thr Ser Pro Gly Ala Ile His Tyr Cys Ala Ser Thr Ser Glu Glu Ser
        180                 185                 190

Trp Thr Asp Ser Glu Val Asp Ser Ser Cys Ser Gly Gln Pro Ile His
        195                 200                 205

Leu Trp Gln Phe Leu Lys Glu Leu Leu Leu Lys Pro His Ser Tyr Gly
    210                 215                 220

Arg Phe Ile Arg Trp Leu Asn Lys Glu Lys Gly Ile Phe Lys Ile Glu
225                 230                 235                 240

Asp Ser Ala Gln Val Ala Arg Leu Xaa Gly Ile Arg Lys Asn Arg Pro
            245                 250                 255

Ala Met Asn Tyr Asp Lys Leu Ser Arg Ser Ile Arg Gln Tyr Tyr Lys
        260                 265                 270

Lys Gly Ile Ile Arg Lys Pro Asp Ile Xaa Gln Arg Leu Val Tyr Gln
        275                 280                 285

Phe Val His Pro Ile
    290
```

```
<210> 634
<211> 227
<212> PRT
<213> Homo sapiens

<400> 634
Pro Ala Gly Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Ala
  1                 5                 10                 15

Glu Glu Glu Glu Glu Glu Asp Glu Glu Glu Glu Glu Glu Glu Glu Glu
            20                 25                 30

Glu Glu Glu Glu Glu Pro Gln Gln Arg Gly Gln Gly Glu Lys Ser Ala
        35                 40                 45

Thr Pro Ser Arg Lys Ile Leu Asp Pro Asn Thr Gly Glu Pro Ala Pro
    50                 55                 60

Val Leu Ser Ser Pro Pro Pro Ala Asp Val Ser Thr Phe Leu Ala Phe
65                 70                 75                 80

Pro Ser Pro Glu Lys Leu Leu Arg Leu Gly Pro Lys Ser Ser Val Leu
                85                 90                 95

Ile Ala Gln Gln Thr Asp Thr Ser Asp Pro Glu Lys Val Val Ser Ala
```

```
                100                    105                   110

Phe Leu Lys Val Ser Ser Val Phe Lys Asp Glu Ala Thr Val Arg Met
        115                 120                 125

Ala Val Gln Asp Ala Val Asp Ala Leu Met Gln Lys Ala Phe Asn Ser
    130                 135                 140

Ser Ser Phe Asn Ser Asn Thr Phe Leu Thr Arg Leu Leu Val His Met
145                 150                 155                 160

Gly Leu Leu Lys Ser Glu Asp Lys Val Lys Ala Ile Ala Asn Leu Tyr
                165                 170                 175

Gly Pro Leu Met Ala Leu Asn His Met Val Gln Gln Asp Tyr Phe Pro
            180                 185                 190

Lys Ala Leu Ala Pro Leu Leu Leu Ala Phe Val Thr Lys Pro Asn Ser
        195                 200                 205

Ala Leu Glu Ser Cys Ser Phe Ala Arg His Ser Leu Leu Gln Thr Leu
    210                 215                 220

Tyr Lys Val
225
```

<210> 635
<211> 126
<212> PRT
<213> Homo sapiens

<400> 635
```
Thr Ser Gly Cys Ile Ser Asn Gly Lys Met Ser Ser Asn Val Pro Ala
  1               5               10                  15

Asp Met Ile Asn Leu Arg Leu Ile Leu Val Ser Gly Lys Thr Lys Glu
            20                  25                  30

Phe Leu Phe Ser Pro Asn Asp Ser Ala Ser Asp Ile Ala Lys His Val
        35                  40                  45

Tyr Asp Asn Trp Pro Met Asp Trp Glu Glu Glu Gln Val Ser Ser Pro
    50                  55                  60

Asn Ile Leu Arg Leu Ile Tyr Gln Gly Arg Phe Leu His Gly Asn Val
65                  70                  75                  80

Thr Leu Gly Ala Leu Lys Leu Pro Phe Gly Lys Thr Thr Val Met His
                85                  90                  95
```

Leu Val Ala Arg Glu Thr Leu Pro Glu Pro Asn Ser Gln Gly Gln Arg
            100   105   110

Asn Arg Glu Lys Thr Gly Glu Ser Asn Cys Cys Val Ile Leu
        115   120   125

<210> 636
<211> 195
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 636
Val Ser Gly Phe Ala Gly Pro Ala Ser Leu Ile Ser Met Lys Leu Leu
    1   5   10   15

Ser Leu Val Ala Val Val Gly Cys Leu Leu Val Pro Pro Ala Glu Ala
            20   25   30

Asn Lys Ser Ser Glu Asp Ile Arg Cys Lys Cys Ile Cys Pro Pro Tyr
            35   40   45

Arg Asn Ile Ser Gly His Ile Tyr Asn Gln Asn Val Ser Gln Lys Asp
        50   55   60

Cys Asn Cys Leu His Val Val Glu Pro Met Pro Val Pro Gly His Asp
65   70   75   80

Val Glu Ala Tyr Cys Leu Leu Cys Glu Cys Arg Tyr Glu Glu Arg Xaa
                85   90   95

Thr Thr Thr Ile Lys Val Ile Ile Val Ile Tyr Leu Ser Val Val Gly
            100   105   110

Ala Leu Leu Leu Tyr Met Ala Phe Leu Met Leu Val Asp Pro Leu Ile
        115   120   125

Arg Lys Pro Asp Ala Tyr Thr Glu Gln Leu His Asn Glu Glu Glu Asn
        130   135   140

Glu Asp Ala Arg Ser Met Ala Ala Ala Ala Ser Leu Gly Gly Pro
145   150   155   160

Arg Ala Asn Thr Val Leu Glu Arg Val Glu Gly Ala Gln Gln Arg Trp

```
                    165                  170                  175
        Lys Leu Gln Val Gln Glu Gln Arg Lys Thr Val Phe Asp Arg His Lys
                180                  185                  190

        Met Leu Ser
                195
```

```
<210> 637
<211> 159
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (138)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (151)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (156)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 637
Arg Pro Thr Arg Pro Gly Asn Ser Arg Arg Arg Gly Arg Arg Gly Cys
  1               5                  10                  15

Trp Arg Leu Leu Gly Phe Gly Ala Ala Ala Ile Met Pro Gly Ile Val
             20                  25                  30

Glu Leu Pro Thr Leu Glu Asp Leu Lys Val Gln Glu Val Lys Val Ser
         35                  40                  45

Ser Ser Val Leu Lys Ala Ala Ala His His Tyr Gly Val Gln Cys Asp
```

```
        50                    55                    60

   Lys Pro Asn Lys Glu Phe Met Leu Cys Arg Trp Glu Glu Lys Asp Pro
   65                    70                    75                    80

   Arg Arg Cys Leu Glu Glu Gly Lys Leu Val Asn Xaa Cys Ala Leu Asp
                         85                    90                    95

   Phe Phe Arg Gln Ile Lys Leu Ser Leu Cys Arg Ala Phe Tyr Arg Leu
                        100                   105                   110

   Leu Asp Xaa His Arg Leu Leu Arg Pro Ala Val Phe Ser Ser Leu Pro
                115                   120                   125

   Gln Thr Ala Gly Gln Phe Asp Asp Val Xaa Gly Ala Thr Gly Met Val
        130                   135                   140

   Arg Leu Asn Trp Gly Lys Xaa Ser Ser His Gln Xaa Glu Asn Ser
   145                   150                   155
```

<210> 638
<211> 20
<212> PRT
<213> Homo sapiens

<400> 638

```
   Phe Ser Arg Asp Lys Val Ser Pro Cys Trp Pro Gly Trp Ser Arg Thr
    1               5                    10                   15

   Pro Gly Leu Arg
            20
```

<210> 639
<211> 408
<212> PRT
<213> Homo sapiens

<400> 639

```
   Thr Trp Gly Gln Thr Pro Cys Ser Pro Gly His Gly Gln Arg Pro Ser
    1               5                    10                   15

   Ser Thr Cys Leu Thr Val Gly Pro Gly Gly Gly Pro Ser Leu Gly Arg
                20                    25                    30

   Pro Cys Pro Gln Leu Leu Leu Gln Phe Gly Val Leu Phe Cys Thr Ile
            35                    40                    45
```

597

```
Leu Leu Leu Leu Trp Val Ser Val Phe Leu Tyr Gly Ser Phe Tyr Tyr
    50              55              60

Ser Tyr Met Pro Thr Val Ser His Leu Ser Pro Val His Phe Tyr Tyr
65              70              75              80

Arg Thr Asp Cys Asp Ser Ser Thr Thr Ser Leu Cys Ser Phe Pro Val
            85              90              95

Ala Asn Val Ser Leu Thr Lys Gly Gly Arg Asp Arg Val Leu Met Tyr
            100             105             110

Gly Gln Pro Tyr Arg Val Thr Leu Glu Leu Glu Leu Pro Glu Ser Pro
        115             120             125

Val Asn Gln Asp Leu Gly Met Phe Leu Val Thr Ile Ser Cys Tyr Thr
    130             135             140

Arg Gly Gly Arg Ile Ile Ser Thr Ser Ser Arg Ser Val Met Leu His
145             150             155             160

Tyr Arg Ser Asp Leu Leu Gln Met Leu Asp Thr Leu Val Phe Ser Ser
            165             170             175

Leu Leu Leu Phe Gly Phe Ala Glu Gln Lys Gln Leu Leu Glu Val Glu
            180             185             190

Leu Tyr Ala Asp Tyr Arg Glu Asn Ser Tyr Val Pro Thr Thr Gly Ala
        195             200             205

Ile Ile Glu Ile His Ser Lys Arg Ile Gln Leu Tyr Gly Ala Tyr Leu
    210             215             220

Arg Ile His Ala His Phe Thr Gly Leu Arg Tyr Leu Leu Tyr Asn Phe
225             230             235             240

Pro Met Thr Cys Ala Phe Ile Gly Val Ala Ser Asn Phe Thr Phe Leu
            245             250             255

Ser Val Ile Val Leu Phe Ser Tyr Met Gln Trp Val Trp Gly Gly Ile
            260             265             270

Trp Pro Arg His Arg Phe Ser Leu Gln Val Asn Ile Arg Lys Arg Asp
        275             280             285

Asn Ser Arg Lys Glu Val Gln Arg Arg Ile Ser Ala His Gln Pro Gly
    290             295             300

Pro Glu Gly Gln Glu Glu Ser Thr Pro Gln Ser Asp Val Thr Glu Asp
305             310             315             320
```

598

```
Gly Glu Ser Pro Glu Asp Pro Ser Gly Thr Glu Gly Gln Leu Ser Glu
            325             330             335

Glu Glu Lys Pro Asp Gln Gln Pro Leu Ser Gly Glu Glu Glu Leu Glu
            340             345             350

Pro Glu Ala Ser Asp Gly Ser Gly Ser Trp Glu Asp Ala Ala Leu Leu
        355             360             365

Thr Glu Ala Asn Leu Pro Ala Pro Ala Pro Ala Ser Ala Ser Ala Pro
    370             375             380

Val Leu Glu Thr Leu Gly Ser Ser Glu Pro Ala Gly Gly Ala Leu Arg
385             390             395             400

Gln Arg Pro Thr Cys Ser Ser Ser
                405
```

```
<210> 640
<211> 288
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (268)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (271)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (273)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

```
<221> SITE
<222> (274)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (276)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (286)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 640
Phe Ser Ser Ser Ala Cys Pro Ser Val Xaa Ser Leu Phe Val Xaa Leu
 1           5                  10                  15

Gly Lys Asn Pro His Asp Ala Gln Gly His Pro Arg Ala Ser Glu Asp
            20                  25                  30

Gln Pro Ser Ser Gly Lys Pro Val Thr Ser Tyr Pro Gly Glu Cys Gly
        35                  40                  45

Phe Val Phe Thr Lys Glu Ala Ser Leu Glu Ile Arg Asp Met Leu Leu
    50                  55                  60

Ala Asn Lys Val Pro Ala Ala Ala Arg Ala Gly Ala Ile Ala Pro Cys
65                  70                  75                  80

Glu Val Thr Val Pro Ala Gln Asn Thr Gly Leu Gly Pro Glu Lys Thr
                85                  90                  95

Ser Phe Phe Gln Ala Leu Gly Ile Thr Thr Lys Ile Ser Arg Gly Thr
            100                 105                 110

Ile Glu Ile Leu Ser Asp Val Gln Leu Ile Lys Thr Gly Asp Lys Val
        115                 120                 125

Gly Ala Ser Glu Ala Thr Leu Leu Asn Met Leu Asn Ile Ser Pro Phe
    130                 135                 140

Ser Phe Gly Leu Ile Ile Gln Gln Val Phe Asp Asn Gly Ser Ile Tyr
145                 150                 155                 160

Asn Pro Glu Val Leu Asp Ile Thr Glu Glu Thr Leu His Ser Arg Phe
            165                 170                 175

Leu Glu Gly Val Arg Asn Val Ala Ser Val Cys Leu Gln Ile Gly Tyr
            180                 185                 190
```

```
Pro Thr Val Ala Ser Val Pro His Ser Ile Ile Asn Gly Tyr Lys Arg
        195             200             205

Val Leu Ala Leu Ser Val Glu Thr Asp Tyr Thr Phe Pro Leu Ala Glu
    210             215             220

Lys Val Lys Ala Phe Leu Ala Asp Pro Ser Ala Phe Val Ala Ala Ala
225             230             235             240

Pro Val Ala Ala Ala Thr Thr Ala Ala Pro Ala Ala Ala Ala Ala Pro
            245             250             255.

Ala Lys Val Glu Ala Lys Glu Glu Ser Glu Glu Xaa Asp Glu Xaa Ile
        260             265             270

Xaa Xaa Ser Xaa Ile Ser Lys Ser Asn Asn Ser Ser Gln Xaa Ile Val
        275             280             285
```

```
<210> 641
<211> 444
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 641
Asn Glu Gln Asp Asn Cys Val Leu Ile His Asp Val Asp Gln Arg Asn
  1           5               10              15

Ser Asp Lys Asp Ile Phe Gly Asp Ala Cys Asp Asn Cys Leu Ser Val
            20              25              30

Leu Xaa Asn Asp Gln Lys Asp Thr Asp Gly Asp Gly Arg Gly Asp Ala
        35              40              45

Cys Asp Asp Asp Met Asp Gly Asp Gly Ile Lys Asn Ile Leu Asp Asn
    50              55              60

Cys Pro Lys Phe Pro Asn Arg Asp Gln Arg Asp Lys Asp Gly Asp Gly
65              70              75              80

Val Gly Asp Ala Cys Asp Ser Cys Pro Asp Val Ser Asn Pro Asn Gln
            85              90              95
```

```
Ser Asp Val Asp Asn Asp Leu Val Gly Asp Ser Cys Asp Thr Asn Gln
        100                 105             110

Asp Ser Asp Gly Asp Gly His Gln Asp Ser Thr Asp Asn Cys Pro Thr
        115                 120             125

Val Ile Asn Ser Ala Gln Leu Asp Thr Asp Lys Asp Gly Ile Gly Asp
    130                 135             140

Glu Cys Asp Asp Asp Asp Asp Asn Asp Gly Ile Pro Asp Leu Val Pro
145                 150             155             160

Pro Gly Pro Asp Asn Cys Arg Leu Val Pro Asn Pro Ala Gln Glu Asp
            165             170             175

Ser Asn Ser Asp Gly Val Gly Asp Ile Cys Glu Ser Asp Phe Asp Gln
            180             185             190

Asp Gln Val Ile Asp Arg Ile Asp Val Cys Pro Glu Asn Ala Glu Val
        195             200             205

Thr Leu Thr Asp Phe Arg Ala Tyr Gln Thr Val Val Leu Asp Pro Glu
    210             215             220

Gly Asp Ala Gln Ile Asp Pro Asn Trp Val Val Leu Asn Gln Gly Met
225             230             235             240

Glu Ile Val Gln Thr Met Asn Ser Asp Pro Gly Leu Ala Val Gly Tyr
            245             250             255

Thr Ala Phe Asn Gly Val Asp Phe Glu Gly Thr Phe His Val Asn Thr
            260             265             270

Gln Thr Asp Asp Asp Tyr Ala Gly Phe Ile Phe Gly Tyr Gln Asp Ser
        275             280             285

Ser Ser Phe Tyr Val Val Met Trp Lys Gln Thr Glu Gln Thr Tyr Trp
    290             295             300

Gln Ala Thr Pro Phe Arg Ala Val Ala Glu Pro Gly Ile Gln Leu Lys
305             310             315             320

Ala Val Lys Ser Lys Thr Gly Pro Gly Glu His Leu Arg Asn Ser Leu
            325             330             335

Trp His Thr Gly Asp Thr Ser Asp Gln Val Arg Leu Leu Trp Lys Asp
            340             345             350

Ser Arg Asn Val Gly Trp Lys Asp Lys Val Ser Tyr Arg Trp Phe Leu
    355             360             365
```

602

```
Gln His Arg Pro Gln Val Gly Tyr Ile Arg Val Arg Phe Tyr Glu Gly
    370             375             380

Ser Glu Leu Val Ala Asp Ser Gly Val Thr Ile Asp Thr Thr Met Arg
385             390             395             400

Gly Gly Arg Leu Gly Val Phe Cys Phe Ser Gln Glu Asn Ile Ile Trp
            405             410             415

Ser Asn Leu Lys Tyr Arg Cys Asn Asp Thr Ile Pro Glu Asp Phe Gln
            420             425             430

Glu Phe Gln Thr Gln Asn Phe Asp Arg Phe Asp Asn
        435             440
```

<210> 642
<211> 326
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (296)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 642
```
Ser Ala Arg Ala Ser Asp Leu Gly Ala Pro Arg Thr Trp Thr Gly Ala
  1             5             10             15

Ala Ala Gly Pro Arg Thr Pro Ser Ala His Ile Pro Val Pro Ala Gln
            20             25             30

Arg Ala Thr Pro Gly Lys Ala Arg Leu Asp Glu Val Met Ala Ala Ala
        35             40             45

Ala Xaa Thr Ser Leu Ser Thr Ser Pro Leu Leu Leu Gly Ala Pro Val
    50             55             60

Ala Ala Phe Ser Pro Glu Pro Gly Leu Glu Pro Trp Lys Glu Ala Leu
65             70             75             80

Val Arg Pro Pro Gly Ser Tyr Ser Ser Ser Asn Ser Gly Asp Trp
            85             90             95
```

```
Gly Trp Asp Leu Ala Ser Asp Gln Ser Ser Pro Ser Thr Pro Ser Pro
        100                 105                 110

Pro Leu Pro Pro Glu Ala Ala His Phe Leu Phe Gly Glu Pro Thr Leu
        115                 120                 125

Arg Lys Arg Lys Ser Pro Ala Gln Val Met Phe Gln Cys Leu Trp Lys
        130                 135                 140

Ser Cys Gly Lys Val Leu Ser Thr Ala Ser Ala Met Gln Arg His Ile
145                 150                 155                 160

Arg Leu Val His Leu Gly Arg Gln Ala Glu Pro Asp Gln Ser Asp Gly
                165                 170                 175

Glu Glu Asp Phe Tyr Tyr Thr Glu Leu Asp Val Gly Val Asp Thr Leu
                180                 185                 190

Thr Asp Gly Leu Ser Ser Leu Thr Pro Val Ser Pro Thr Ala Ser Met
        195                 200                 205

Pro Pro Ala Phe Pro Arg Leu Glu Leu Pro Glu Leu Leu Glu Pro Pro
        210                 215                 220

Ala Leu Pro Ser Pro Leu Arg Pro Pro Ala Pro Pro Leu Pro Pro Pro
225                 230                 235                 240

Pro Val Leu Ser Thr Val Ala Asn Pro Gln Ser Cys His Ser Asp Arg
                245                 250                 255

Val Tyr Gln Gly Cys Leu Thr Pro Ala Arg Leu Glu Pro Gln Pro Thr
                260                 265                 270

Glu Val Gly Ala Cys Pro Pro Ala Leu Ser Ser Arg Ile Gly Val Thr
                275                 280                 285

Leu Arg Lys Pro Arg Gly Asp Xaa Lys Lys Cys Arg Lys Val Tyr Gly
        290                 295                 300

Met Glu Arg Arg Asp Leu Trp Cys Thr Ala Cys Arg Trp Lys Lys Ala
305                 310                 315                 320

Cys Gln Arg Phe Leu Asp
                325
```

<210> 643
<211> 129
<212> PRT

```
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 643
Asp Val Arg Leu Ser Gly Arg Asn Xaa Xaa Val Asp Val Xaa Asp His
1               5                   10                  15
```

```
Gln Xaa Xaa Leu Leu Glu Gln Xaa Asp Leu Leu Ala Gly Leu Ile Ser
            20                  25                  30

Asn Ser Ser Asp Ala Xaa Asp Lys Ile Arg Tyr Glu Ser Leu Thr Asp
            35                  40                  45

Pro Ser Lys Leu Asp Ser Gly Lys Glu Leu His Ile Asn Leu Ile Pro
        50                  55                  60

Asn Lys Gln Asp Arg Thr Leu Thr Ile Val Gly Tyr Arg Asp Arg Met
65                  70                  75                  80

Thr Lys Ala Asp Leu Ile Asn Asn Leu Gly Thr Ile Ala Xaa Ser Gly
                85                  90                  95

Thr Lys Ala Phe Met Glu Xaa Leu Gln Ala Gly Ala Asp Ile Ser Met
            100                 105                 110

Ile Gly Gln Phe Gly Val Gly Phe Tyr Ser Ala Tyr Leu Val Ala Arg
        115                 120                 125

Arg
```

```
<210> 644
<211> 156
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 644
Ser Thr His Ala Ser Ala Ser Arg Arg Leu Leu Xaa Asp Val Cys Gln
 1               5                  10                  15

Asp Cys Ile Gln Met Val Thr Asp Ile Gln Thr Ala Val Arg Thr Asn
            20                  25                  30

Ser Thr Phe Val Glu Ala Leu Val Asp His Ala Lys Ala Gln Cys Asp
            35                  40                  45

Leu Leu Gly Pro Gly Met Ala Asp Met Cys Lys Asn Tyr Ile Asn Gln
        50                  55                  60

Tyr Ser Asp Ile Ala Val Gln Met Met Met His Met Gln Pro Lys Glu
65                  70                  75                  80
```

```
Ile Cys Gly Leu Val Gly Phe Cys Asp Gln Val Lys Glu Met Pro Met
                85                  90                  95

Gln Thr Leu Ile Pro Ala Lys Ala Val Ser Glu Asn Val Ile Pro Ala
                100             105                 110

Leu Glu Leu Val Glu Pro Ile Lys Lys Asp Thr Val Gln Ala Lys Thr
            115             120                 125

Ser Val Ser Cys Gly Asp Met Arg Val Thr Trp Leu Lys Glu Val Ala
        130             135                 140

Lys Leu His Trp Thr Thr Thr Gly Leu Arg Lys Lys
145                 150                 155
```

<210> 645
<211> 115
<212> PRT
<213> Homo sapiens

<400> 645
```
Ala Asp Pro Gly Val Gly Ala Val Pro Gly Leu Ala Ala Asp Leu Ala
 1               5                   10                  15

Thr Ala Ala Arg Ser Leu Gly Pro Ala Leu Val Leu Asp Leu Gly Arg
                20              25                  30

Pro Pro Ser Pro Asp Pro His Glu Gly Pro Ser Pro Ser Pro Arg Arg
            35              40                  45

Ser Pro Asp Leu Val Arg Gly Pro Gly Pro Gly Leu Gly Pro Gly Val
        50              55                  60

Leu Pro Gln Cys Pro Arg Gly Asn Pro Asn Pro Gly Arg Asp Arg Arg
65              70                  75                  80

Val Pro Pro Ser Leu Leu Lys Arg Lys Glu Arg Cys Pro Leu Lys Lys
                85              90                  95

Met Val Met Ser Gly Asn Pro Arg His Ile Thr Leu Ile His Lys Trp
                100             105                 110

Asp Leu Gly
        115
```

<210> 646

607

```
<211> 153
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 646
Tyr Met Pro Asn Gly Ser Leu Asn Glu Leu Leu His Arg Lys Thr Glu
 1               5                  10                  15

Tyr Pro Asp Val Ala Trp Pro Leu Arg Phe Arg Ile Leu His Glu Ile
            20                  25                  30

Ala Leu Gly Val Asn Tyr Leu His Asn Met Thr Pro Pro Leu Leu His
            35                  40                  45

His Asp Leu Lys Thr Gln Asn Ile Leu Leu Asp Asn Glu Phe His Val
         50                  55                  60

Lys Ile Ala Asp Phe Gly Leu Ser Lys Trp Arg Met Met Ser Leu Ser
 65                  70                  75                  80

Gln Ser Arg Ser Ser Lys Ser Ala Pro Glu Gly Gly Thr Ile Ile Tyr
                85                  90                  95

Met Pro Pro Glu Asn Tyr Glu Pro Gly Gln Lys Ser Arg Ala Ser Ile
            100                 105                 110

Lys His Asp Ile Tyr Ser Tyr Ala Val Ile Thr Trp Glu Val Xaa Ser
            115                 120                 125

Arg Lys Gln Pro Phe Glu Asp Val Thr Asn Pro Leu Gln Ile Met Tyr
            130                 135                 140

Ser Val Ser Gln Gly His Trp Thr Gly
145                 150


<210> 647
<211> 220
<212> PRT
<213> Homo sapiens

<400> 647
Ala Ser Glu Gln Gly Ala Val Gly Gln Gly Gly Leu Ala Gly Val Pro
 1               5                  10                  15
```

```
Thr Leu Thr Ser Leu Pro Ser Ser Cys Pro Glu Pro Arg Pro Ser Met
            20              25              30

Asp Ala Val Asp Ala Thr Met Glu Lys Leu Arg Ala Gln Cys Leu Ser
            35              40              45

Arg Gly Ala Ser Gly Ile Gln Gly Leu Ala Arg Phe Phe Arg Gln Leu
    50              55              60

Asp Arg Asp Gly Ser Arg Ser Leu Asp Ala Asp Glu Phe Arg Gln Gly
65              70              75              80

Leu Ala Lys Leu Gly Leu Val Leu Asp Gln Ala Glu Ala Glu Gly Val
            85              90              95

Cys Arg Lys Trp Asp Arg Asn Gly Ser Gly Thr Leu Asp Leu Glu Glu
            100             105             110

Phe Leu Arg Ala Leu Arg Pro Pro Met Ser Gln Ala Arg Glu Ala Val
            115             120             125

Ile Ala Ala Ala Phe Ala Lys Leu Asp Arg Ser Gly Asp Gly Val Val
    130             135             140

Thr Val Asp Asp Leu Arg Gly Val Tyr Ser Gly Arg Ala His Pro Lys
145             150             155             160

Val Arg Ser Gly Glu Trp Thr Glu Asp Glu Val Leu Arg Arg Phe Leu
            165             170             175

Asp Asn Phe Asp Ser Ser Glu Lys Asp Gly Gln Val Thr Leu Ala Glu
            180             185             190

Phe Gln Asp Tyr Tyr Ser Gly Val Ser Ala Ser Met Asn Thr Asp Glu
            195             200             205

Glu Phe Val Ala Met Met Thr Ser Ala Trp Gln Leu
    210             215             220
```

```
<210> 648
<211> 118
<212> PRT
<213> Homo sapiens

<400> 648
Asp Asn Arg Thr Leu Thr Lys Gly Pro Asp Thr Val Gly Thr Met Gly
  1               5               10              15

Gln Cys Arg Ser Ala Asn Ala Glu Asp Ala Gln Glu Phe Ser Asp Val
```

```
                    20                25                30

Glu Arg Ala Ile Glu Thr Leu Ile Lys Asn Phe His Gln Tyr Ser Val
        35                40                45

Glu Gly Gly Lys Glu Thr Leu Thr Pro Ser Glu Leu Arg Asp Leu Val
    50                55                60

Thr Gln Gln Leu Pro His Leu Met Pro Ser Asn Cys Gly Leu Glu Glu
65                70                75                80

Lys Ile Ala Asn Leu Gly Ser Cys Asn Asp Ser Lys Leu Glu Phe Arg
            85                90                95

Ser Phe Trp Glu Leu Ile Gly Glu Ala Ala Lys Ser Val Lys Leu Glu
        100               105               110

Arg Pro Val Arg Gly His
        115
```

```
<210> 649
<211> 309
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 649
Asp His His Gln Gly Ala Glu Ser Val Pro Gly Ile Gly Val Ser Pro
 1               5                10                15

Thr Ser Ser Ser Ser Cys Pro Pro Thr Ser Cys Thr Gln Pro Val Thr
            20                25                30

Thr Trp Ser Pro Gly Leu Arg Val Glu Ser Leu Asp Gly Ala Lys Thr
        35                40                45

Gly Lys Gly Ala Leu Thr Gly Ala Pro Gly Ser Phe Gly Ser Ser Glu
    50                55                60

Phe Leu Thr Gly Leu Arg Asn Thr Ser Glu Ala Arg Xaa Thr Arg Gly
```

610

```
        65                  70                  75                  80

    Pro Ile Met Gln Glu Pro Arg Arg Val Thr Pro Cys Leu Gly Lys Arg
                     85                  90                  95

    Gly Val Lys Thr Pro Gln Leu Gln Pro Gly Ser Ala Phe Leu Pro Arg
                    100                 105                 110

    Val Arg Arg Gln Ser Phe Pro Ala Arg Ser Asp Ser Tyr Thr Thr Val
                115                 120                 125

    Arg Asp Phe Leu Ala Val Pro Arg Thr Ile Ser Ser Ala Ser Ala Thr
        130                 135                 140

    Leu Ile Met Ala Val Ala Val Ser His Phe Arg Pro Gly Pro Glu Xaa
    145                 150                 155                 160

    Trp Asp Thr Ala Ser Met Ala Ala Ser Lys Val Lys Gln Asp Met Pro
                    165                 170                 175

    Pro Pro Gly Gly Tyr Gly Pro Ile Asp Tyr Lys Arg Asn Leu Pro Arg
                    180                 185                 190

    Arg Gly Leu Ser Gly Tyr Ser Met Leu Ala Ile Gly Ile Gly Thr Leu
                195                 200                 205

    Ile Tyr Gly His Trp Ser Ile Met Lys Trp Asn Arg Glu Arg Arg Arg
        210                 215                 220

    Leu Gln Ile Glu Asp Phe Glu Ala Arg Ile Ala Leu Leu Pro Leu Leu
    225                 230                 235                 240

    Gln Ala Glu Thr Asp Arg Arg Thr Leu Gln Met Leu Arg Glu Asn Leu
                    245                 250                 255

    Glu Glu Glu Ala Ile Ile Met Lys Asp Val Pro Asp Trp Lys Val Gly
                    260                 265                 270

    Glu Ser Val Phe His Thr Thr Arg Trp Val Pro Pro Leu Ile Gly Glu
                275                 280                 285

    Leu Tyr Gly Leu Arg Thr Thr Glu Glu Ala Leu His Ala Ser His Gly
        290                 295                 300

    Phe Met Trp Tyr Thr
    305
```

<210> 650
<211> 286

```
<212> PRT
<213> Homo sapiens

<400> 650
Ile Pro Thr Leu Ile Thr Ala Phe Val Leu Ala Thr Ser Gln Ala Gln
 1               5                  10                  15

Ala Gly Trp Leu Gln His Asp Tyr Gly His Leu Ser Val Tyr Arg Lys
            20                  25                  30

Pro Lys Trp Asn His Leu Val His Lys Phe Val Ile Gly His Leu Lys
            35                  40                  45

Gly Ala Ser Ala Asn Trp Trp Asn His Arg His Phe Gln His His Ala
            50                  55                  60

Lys Pro Asn Ile Phe His Lys Asp Pro Asp Val Asn Met Leu His Val
 65                  70                  75                  80

Phe Val Leu Gly Glu Trp Gln Pro Ile Glu Tyr Gly Lys Lys Lys Leu
                85                  90                  95

Lys Tyr Leu Pro Tyr Asn His Gln His Glu Tyr Phe Phe Leu Ile Gly
                100                 105                 110

Pro Pro Leu Leu Ile Pro Met Tyr Phe Gln Tyr Gln Ile Ile Met Thr
            115                 120                 125

Met Ile Val His Lys Asn Trp Val Asp Leu Ala Trp Ala Val Ser Tyr
    130                 135                 140

Tyr Ile Arg Phe Phe Ile Thr Tyr Ile Pro Phe Tyr Gly Ile Leu Gly
145                 150                 155                 160

Ala Leu Leu Phe Leu Asn Phe Ile Arg Phe Leu Glu Ser His Trp Phe
                165                 170                 175

Val Trp Val Thr Gln Met Asn His Ile Val Met Glu Ile Asp Gln Glu
                180                 185                 190

Ala Tyr Arg Asp Trp Phe Ser Ser Gln Leu Thr Ala Thr Cys Asn Val
            195                 200                 205

Glu Gln Ser Phe Phe Asn Asp Trp Phe Ser Gly His Leu Asn Phe Gln
    210                 215                 220

Ile Glu His His Leu Phe Pro Thr Met Pro Arg His Asn Leu His Lys
225                 230                 235                 240

Ile Ala Pro Leu Val Lys Ser Leu Cys Ala Lys His Gly Ile Glu Tyr
                245                 250                 255
```

612

```
Gln Glu Lys Pro Leu Leu Arg Ala Leu Leu Asp Ile Ile Arg Ser Leu
        260               265               270

Lys Lys Ser Gly Lys Leu Trp Leu Asp Ala Tyr Leu His Lys
        275               280               285



<210> 651
<211> 184
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (106)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 651
Glu Arg Gly Pro Ile Pro Val Cys Pro His Lys Ala Ala Ser Ser Val
  1               5               10               15

Ile Ser Leu Leu Arg Ala Glu Leu Arg Leu Tyr Thr Asp Pro His Lys
        20               25               30

Tyr His Xaa Phe Cys Leu Arg Lys Asp Lys Ala His Val Cys Phe Cys
        35               40               45

Phe Arg Phe Leu Phe Ser Phe Phe Xaa Glu Ala Leu Trp Arg Ser Met
     50               55               60

Phe Leu Leu Ser Phe Leu Xaa Lys Pro Ser Phe Trp Ala Thr Gly Leu
 65               70               75               80

Ile Leu Ser Thr Ser Ser Phe Pro Pro Phe Ser Ile Val Ser Leu Pro
```

```
                    85                      90                      95

Pro Ser His Pro Thr Arg Ala Pro Leu Xaa Leu Ser Phe Pro Ser Ser
            100                     105                     110

Pro Ala Val Ser Phe Leu Arg Ser Gly Thr Lys Leu Ile Phe Arg Arg
            115                     120                     125

Arg Pro Arg Gln Lys Glu Ala Gly Leu Ser Gln Ser His Asp Asp Leu
        130                     135                     140

Ser Asn Ala Thr Ala Thr Pro Ser Val Arg Lys Lys Ala Gly Ser Phe
145                     150                     155                     160

Ser Arg Arg Leu Ile Lys Arg Phe Ser Phe Lys Ser Lys Pro Lys Ala
                165                     170                     175

Asn Gly Asn Pro Ser Pro Gln Leu
                180
```

```
<210> 652
<211> 641
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (438)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 652
Gln Gly Ser Glu Pro Ser Ser Glu Asn Ala Asn Asp Thr Ile Ile Leu
  1               5                       10                      15

Arg Asn Leu Asn Pro His Ser Thr Met Asp Ser Ile Leu Gly Ala Leu
                20                      25                      30

Ala Pro Tyr Ala Val Leu Ser Ser Ser Asn Val Arg Val Ile Lys Asp
            35                      40                      45

Lys Gln Thr Gln Leu Asn Arg Gly Phe Ala Phe Ile Gln Leu Ser Thr
        50                      55                      60

Ile Glu Ala Ala Gln Leu Leu Gln Ile Leu Gln Ala Leu His Pro Pro
65                      70                      75                      80

Leu Thr Ile Asp Gly Lys Thr Ile Asn Val Glu Phe Ala Lys Gly Ser
                85                      90                      95
```

```
Lys Arg Asp Met Ala Ser Asn Glu Gly Ser Arg Ile Ser Ala Ala Ser
            100                 105                 110

Val Ala Ser Thr Ala Ile Ala Ala Ala Gln Trp Ala Ile Ser Gln Ala
            115                 120                 125

Ser Gln Gly Gly Glu Gly Thr Trp Ala Thr Ser Glu Glu Pro Pro Val
            130                 135                 140

Asp Tyr Ser Tyr Tyr Gln Gln Asp Glu Gly Tyr Gly Asn Ser Gln Gly
145                 150                 155                 160

Thr Glu Ser Ser Leu Tyr Ala His Gly Tyr Leu Lys Gly Thr Lys Gly
                165                 170                 175

Pro Gly Ile Thr Gly Thr Lys Gly Asp Pro Thr Gly Ala Gly Pro Glu
            180                 185                 190

Ala Ser Leu Glu Pro Gly Ala Asp Ser Val Ser Met Gln Ala Phe Ser
            195                 200                 205

Arg Ala Gln Pro Gly Ala Ala Pro Gly Ile Tyr Gln Gln Ser Ala Glu
    210                 215                 220

Ala Ser Ser Ser Gln Gly Thr Ala Ala Asn Ser Gln Ser Tyr Thr Ile
225                 230                 235                 240

Met Ser Pro Ala Val Leu Lys Ser Glu Leu Gln Ser Pro Thr His Pro
                245                 250                 255

Ser Ser Ala Leu Pro Pro Ala Thr Ser Pro Thr Ala Gln Glu Ser Tyr
            260                 265                 270

Ser Gln Tyr Pro Val Pro Asp Val Ser Thr Tyr Gln Tyr Asp Glu Thr
            275                 280                 285

Ser Gly Tyr Tyr Tyr Asp Pro Gln Thr Gly Leu Tyr Tyr Asp Pro Asn
            290                 295                 300

Ser Gln Tyr Tyr Tyr Asn Ala Gln Ser Gln Tyr Leu Tyr Trp Asp
305                 310                 315                 320

Gly Glu Arg Arg Thr Tyr Val Pro Ala Leu Glu Gln Ser Ala Asp Gly
                325                 330                 335

His Lys Glu Thr Gly Ala Pro Ser Lys Glu Gly Lys Glu Lys Lys Glu
            340                 345                 350

Lys His Lys Thr Lys Thr Ala Gln Gln Ile Ala Lys Asp Met Glu Arg
        355                 360                 365
```

```
Trp Ala Arg Ser Leu Asn Lys Gln Lys Glu Asn Phe Lys Asn Ser Phe
    370             375             380

Gln Pro Ile Ser Ser Leu Arg Asp Asp Glu Arg Arg Glu Ser Ala Thr
385             390             395                     400

Ala Asp Ala Gly Tyr Ala Ile Leu Glu Lys Lys Gly Ala Leu Ala Glu
            405             410             415

Arg Gln His Thr Ser Met Asp Leu Pro Lys Leu Ala Ser Asp Asp Arg
            420             425             430

Pro Ser Pro Pro Arg Xaa Leu Val Ala Ala Tyr Ser Gly Glu Ser Asp
        435             440             445

Ser Glu Glu Glu Gln Glu Arg Gly Gly Pro Glu Arg Glu Glu Lys Leu
    450             455             460

Thr Asp Trp Gln Lys Leu Ala Cys Leu Leu Cys Arg Arg Gln Phe Pro
465             470             475             480

Ser Lys Glu Ala Leu Ile Arg His Gln Gln Leu Ser Gly Leu His Lys
            485             490             495

Gln Asn Leu Glu Ile His Arg Arg Ala His Leu Ser Glu Asn Glu Leu
            500             505             510

Glu Ala Leu Glu Lys Asn Asp Met Glu Gln Met Lys Tyr Arg Asp Arg
    515             520             525

Ala Ala Glu Arg Arg Glu Lys Tyr Gly Ile Pro Glu Pro Pro Glu Pro
    530             535             540

Lys Arg Arg Lys Tyr Gly Gly Ile Ser Thr Ala Ser Val Asp Phe Glu
545             550             555             560

Gln Pro Thr Arg Asp Gly Leu Gly Ser Asp Asn Ile Gly Ser Arg Met
            565             570             575

Leu Gln Ala Met Gly Trp Lys Glu Gly Ser Gly Leu Gly Arg Lys Lys
            580             585             590

Gln Gly Ile Val Thr Pro Ile Glu Ala Gln Thr Arg Val Arg Gly Ser
        595             600             605

Gly Leu Gly Ala Arg Gly Ser Ser Tyr Gly Val Thr Ser Thr Glu Ser
    610             615             620

Tyr Lys Glu Thr Leu His Lys Thr Met Val Thr Arg Phe Asn Glu Ala
625             630             635             640
```

Gln


```
<210> 653
<211> 516
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (247)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 653
Xaa Thr Arg Pro Gly Arg Gln Thr Arg Leu Cys Arg Pro Ala Ile Ser
 1               5                  10                  15

Leu Leu Trp Leu Val Thr Pro Gly Val Pro Ala Phe Ser Gly Trp Gly
            20                  25                  30

Arg Arg His Arg Gly Arg Thr Gly Arg Arg Ala Met Ala Ser Cys Val
            35                  40                  45

Gly Ser Arg Thr Leu Ser Lys Asp Asp Val Asn Tyr Lys Met His Phe
    50                  55                  60

Arg Met Ile Asn Glu Gln Gln Val Glu Asp Ile Thr Ile Asp Phe Phe
65                  70                  75                  80

Tyr Arg Pro His Thr Ile Thr Leu Leu Ser Phe Thr Ile Val Ser Leu
                85                  90                  95

Met Tyr Phe Ala Phe Thr Arg Asp Asp Ser Val Pro Glu Asp Asn Ile
            100                 105                 110

Trp Arg Gly Ile Leu Ser Val Ile Phe Phe Phe Leu Ile Ile Ser Val
            115                 120                 125

Leu Ala Phe Pro Asn Gly Pro Phe Thr Arg Pro His Pro Ala Leu Trp
    130                 135                 140

Arg Met Val Phe Gly Leu Ser Val Leu Tyr Phe Leu Phe Leu Val Phe
145                 150                 155                 160
```

Leu Leu Phe Leu Asn Phe Glu Gln Val Lys Ser Leu Met Tyr Trp Leu
                165   170   175

Asp Pro Asn Leu Arg Tyr Ala Thr Arg Glu Ala Asp Val Met Glu Tyr
                180   185   190

Ala Val Asn Cys His Val Ile Thr Trp Glu Arg Ile Ile Ser His Phe
                195   200   205

Asp Ile Phe Ala Phe Gly His Phe Trp Gly Trp Ala Met Lys Ala Leu
        210   215   220

Leu Ile Arg Ser Tyr Gly Leu Cys Trp Thr Ile Ser Ile Thr Trp Glu
225   230   235   240

Leu Thr Glu Leu Phe Phe Xaa His Leu Leu Pro Asn Phe Ala Glu Cys
                245   250   255

Trp Trp Asp Gln Val Ile Leu Asp Ile Leu Leu Cys Asn Gly Gly Gly
                260   265   270

Ile Trp Leu Gly Met Val Val Cys Arg Phe Leu Glu Met Arg Thr Tyr
            275   280   285

His Trp Ala Ser Phe Lys Asp Ile His Thr Thr Thr Gly Lys Ile Lys
        290   295   300

Arg Ala Val Leu Gln Phe Thr Pro Ala Ser Trp Thr Tyr Val Arg Trp
305   310   315   320

Phe Asp Pro Lys Ser Ser Phe Gln Arg Val Ala Gly Val Tyr Leu Phe
                325   330   335

Met Ile Ile Trp Gln Leu Thr Glu Leu Asn Thr Phe Phe Leu Lys His
            340   345   350

Ile Phe Val Phe Gln Ala Ser His Pro Leu Ser Trp Gly Arg Ile Leu
        355   360   365

Phe Ile Gly Gly Ile Thr Ala Pro Thr Val Arg Gln Tyr Tyr Ala Tyr
        370   375   380

Leu Thr Asp Thr Gln Cys Lys Arg Val Gly Thr Gln Cys Trp Val Phe
385   390   395   400

Gly Val Ile Gly Phe Leu Glu Ala Ile Val Cys Ile Lys Phe Gly Gln
                405   410   415

Asp Leu Phe Ser Lys Thr Gln Ile Leu Tyr Val Val Leu Trp Leu Leu
                420   425   430

```
Cys Val Ala Phe Thr Thr Phe Leu Cys Leu Tyr Gly Met Ile Trp Tyr
        435             440             445

Ala Glu His Tyr Gly His Arg Glu Lys Thr Tyr Ser Glu Cys Glu Asp
    450             455             460

Gly Thr Tyr Ser Pro Glu Ile Ser Trp His His Arg Lys Gly Thr Lys
465             470             475             480

Gly Ser Glu Asp Ser Pro Lys His Ala Gly Asn Asn Glu Ser His
            485             490             495

Ser Ser Arg Arg Arg Asn Arg His Ser Lys Ser Lys Val Thr Asn Gly
        500             505             510

Val Gly Lys Lys
        515
```

```
<210> 654
<211> 663
<212> PRT
<213> Homo sapiens

<400> 654
Leu Glu Cys Arg Glu Ala His Ile Arg Asp Val Pro Val Val Arg Leu
  1           5               10              15

Pro Ala Asp Ser Pro Ile Pro Glu Arg Gly Asp Leu Ser Cys Arg Met
            20              25              30

His Thr Cys Phe Asp Val Tyr Arg Cys Gly Phe Asn Pro Lys Asn Lys
        35              40              45

Ile Lys Val Tyr Ile Tyr Ala Leu Lys Lys Tyr Val Asp Asp Phe Gly
    50              55              60

Val Ser Val Ser Asn Thr Ile Ser Arg Glu Tyr Asn Glu Leu Leu Met
65              70              75              80

Ala Ile Ser Asp Ser Asp Tyr Tyr Thr Asp Asp Ile Asn Arg Ala Cys
            85              90              95

Leu Phe Val Pro Ser Ile Asp Val Leu Asn Gln Asn Thr Leu Arg Ile
            100             105             110

Lys Glu Thr Ala Gln Ala Met Ala Gln Leu Ser Arg Trp Asp Arg Gly
        115             120             125

Thr Asn His Leu Leu Phe Asn Met Leu Pro Gly Gly Pro Pro Asp Tyr
```

```
            130                     135                    140

Asn Thr Ala Leu Asp Val Pro Arg Asp Arg Ala Leu Leu Ala Gly Gly
145                 150                 155                 160

Gly Phe Ser Thr Trp Thr Tyr Arg Gln Gly Tyr Asp Val Ser Ile Pro
                165                 170                 175

Val Tyr Ser Pro Leu Ser Ala Glu Val Asp Leu Pro Glu Lys Gly Pro
            180                 185                 190

Gly Pro Arg Gln Tyr Phe Leu Leu Ser Ser Gln Val Gly Leu His Pro
        195                 200                 205

Glu Tyr Arg Glu Asp Leu Glu Ala Leu Gln Val Lys His Gly Glu Ser
    210                 215                 220

Val Leu Val Leu Asp Lys Cys Thr Asn Leu Ser Glu Gly Val Leu Ser
225                 230                 235                 240

Val Arg Lys Arg Cys His Lys His Gln Val Phe Asp Tyr Pro Gln Val
            245                 250                 255

Leu Gln Glu Ala Thr Phe Cys Val Val Leu Arg Gly Ala Arg Leu Gly
            260                 265                 270

Gln Ala Val Leu Ser Asp Val Leu Gln Ala Gly Cys Val Pro Val Val
        275                 280                 285

Ile Ala Asp Ser Tyr Ile Leu Pro Phe Ser Glu Val Leu Asp Trp Lys
    290                 295                 300

Arg Ala Ser Val Val Val Pro Glu Glu Lys Met Ser Asp Val Tyr Ser
305                 310                 315                 320

Ile Leu Gln Ser Ile Pro Gln Arg Gln Ile Glu Glu Met Gln Arg Gln
                325                 330                 335

Ala Arg Trp Phe Trp Glu Ala Tyr Phe Gln Ser Ile Lys Ala Ile Ala
            340                 345                 350

Leu Ala Thr Leu Gln Ile Ile Asn Asp Arg Ile Tyr Pro Tyr Ala Ala
        355                 360                 365

Ile Ser Tyr Glu Glu Trp Asn Asp Pro Pro Ala Val Lys Trp Gly Ser
    370                 375                 380

Val Ser Asn Pro Leu Phe Leu Pro Leu Ile Pro Pro Gln Ser Gln Gly
385                 390                 395                 400

Phe Thr Ala Ile Val Leu Thr Tyr Asp Arg Val Glu Ser Leu Phe Arg
```

620

```
                  405                   410                   415

     Val Ile Thr Glu Val Ser Lys Val Pro Ser Leu Ser Lys Leu Leu Val
                 420                   425                   430

     Val Trp Asn Asn Gln Asn Lys Asn Pro Pro Glu Asp Ser Leu Trp Pro
                 435                   440                   445

     Lys Ile Arg Val Pro Leu Lys Val Val Arg Thr Ala Glu Asn Lys Leu
                 450                   455                   460

     Ser Asn Arg Phe Phe Pro Tyr Asp Glu Ile Glu Thr Glu Ala Val Leu
         465                   470                   475                   480

    ·Ala Ile Asp Asp Asp Ile Ile Met Leu Thr Ser Asp Glu Leu Gln Phe
                     485                   490                   495

     Gly Tyr Glu Val Trp Arg Glu Phe Pro Asp Arg Leu Val Gly Tyr Pro
                 500                   505                   510

     Gly Arg Leu His Leu Trp Asp His Glu Met Asn Lys Trp Lys Tyr Glu
                 515                   520                   525

     Ser Glu Trp Thr Asn Glu Val Ser Met Val Leu Thr Gly Ala Ala Phe
                 530                   535                   540

     Tyr His Lys Tyr Phe Asn Tyr Leu Tyr Thr Tyr Lys Met Pro Gly Asp
         545                   550                   555                   560

     Ile Lys Asn Trp Val Asp Ala His Met Asn Cys Glu Asp Ile Ala Met
                     565                   570                   575

     Asn Phe Leu Val Ala Asn Val Thr Gly Lys Ala Val Ile Lys Val Thr
                     580                   585                   590

     Pro Arg Lys Lys Phe Lys Cys Pro Glu Cys Thr Ala Ile Asp Gly Leu
                 595                   600                   605

     Ser Leu Asp Gln Thr His Met Val Glu Arg Ser Glu Cys Ile Asn Lys
         610                   615                   620

     Phe Ala Ser Val Phe Gly Thr Met Pro Leu Lys Val Val Glu His Arg
     625                   630                   635                   640

     Ala Asp Pro Val Leu Tyr Lys Asp Asp Phe Pro Glu Lys Leu Lys Ser
                     645                   650                   655

     Phe Pro Asn Ile Gly Ser Leu
                     660
```

621

```
<210> 655
<211> 97
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 655
Ala Thr Gln Leu Leu Ser Ser Phe Ser Val Gly Pro Leu Leu Gln Ile
 1               5                  10                  15

Thr Phe Tyr Glu Asp Lys Asn Phe Gln Gly Arg Arg Tyr Asp Cys Asp
            20                  25                  30

Cys Asp Cys Ala Asp Xaa His Thr Tyr Leu Ser Arg Cys Asn Ser Ile
        35                  40                  45

Lys Val Glu Gly Gly Thr Trp Ala Val Tyr Glu Arg Pro Asn Phe Ala
    50                  55                  60

Gly Tyr Met Tyr Ile Leu Pro Gln Gly Glu Tyr Pro Glu Tyr Gln Arg
65                  70                  75                  80

Trp Met Gly Leu Asn Asp Arg Leu Ser Ser Xaa Arg Ala Val Ser Ser
            85                  90                  95

Ala
```

```
<210> 656
<211> 167
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

```
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 656
Asp Ala Asp Leu Val Ile Trp Asp Pro Asp Ser Val Lys Thr Ile Ser
 1               5                  10                  15

Ala Lys Thr His Asn Ser Ser Leu Glu Tyr Asn Ile Phe Glu Gly Met
            20                  25                  30

Glu Cys Arg Gly Ser Pro Leu Val Val Ile Ser Gln Gly Lys Ile Val
        35                  40                  45

Leu Glu Asp Gly Thr Leu His Val Thr Glu Xaa Ser Gly Arg Tyr Ile
    50                  55                  60

Pro Arg Lys Pro Phe Pro Asp Phe Xaa Tyr Lys Arg Ile Lys Ala Arg
 65                  70                  75                  80

Ser Arg Leu Ala Glu Leu Arg Gly Val Pro Arg Gly Leu Tyr Asp Gly
            85                  90                  95

Pro Val Cys Glu Val Ser Val Thr Pro Lys Thr Val Thr Pro Ala Ser
            100                 105                 110

Ser Ala Lys Thr Ser Pro Ala Lys Gln Gln Ala Pro Pro Val Arg Asn
            115                 120                 125

Leu His Gln Ser Gly Phe Ser Leu Ser Gly Ala Gln Ile Asp Asp Asn
    130                 135                 140

Ile Pro Arg Arg Thr Thr Gln Arg Ile Val Ala Pro Pro Gly Gly Arg
145                 150                 155                 160

Ala Asn Ile Thr Ser Leu Gly
                165


<210> 657
<211> 176
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 657
Xaa Ser Leu Asn Leu Xaa Lys Leu Ala Leu His Arg Gly Gly Gly Arg
 1   5   10   15

Ser Arg Thr Ser Gly Ser Pro Gly Leu Xaa Glu Phe Gly Thr Ser Ala
            20   25   30

Val Leu Leu Arg Leu Gly Asp Glu Leu Glu Met Ile Arg Pro Ser Val
        35   40   45

Tyr Arg Asn Val Ala Arg Gln Leu His Ile Ser Leu Gln Ser Glu Pro
    50   55   60

Val Val Thr Asp Ala Phe Leu Ala Val Ala Gly His Ile Phe Ser Ala
 65   70   75   80

Gly Ile Thr Trp Gly Lys Val Val Ser Leu Tyr Ala Val Ala Ala Gly
            85   90   95

Leu Ala Val Asp Cys Val Arg Gln Ala Gln Pro Ala Met Val His Ala
            100   105   110

Leu Val Asp Cys Leu Gly Glu Phe Val Arg Lys Thr Leu Ala Thr Trp
        115   120   125

Leu Arg Arg Arg Gly Gly Trp Thr Asp Val Leu Lys Cys Val Val Ser
    130   135   140

Thr Asp Pro Gly Leu Arg Ser His Trp Leu Val Ala Ala Leu Cys Ser
145   150   155   160

Phe Gly Arg Phe Leu Lys Ala Ala Phe Phe Val Leu Leu Pro Glu Arg
            165   170   175

<210> 658
<211> 137
<212> PRT

<213> Homo sapiens

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 658
Gly Pro Val Gly Ser Ser Ser Glu Ala Pro Arg Gly Ala Gly Asp Ala
 1   5   10   15

Gly Met Ala Gly Glu Leu Thr Pro Glu Glu Ala Gln Tyr Lys Lys
            20   25   30

Ala Phe Ser Ala Val Asp Thr Asp Gly Asn Gly Thr Ile Asn Ala Gln
        35   40   45

Glu Leu Gly Ala Ala Leu Lys Ala Thr Gly Lys Asn Leu Ser Glu Ala
    50   55   60

Gln Leu Arg Lys Leu Ile Ser Glu Val Asp Xaa Asp Gly Asp Gly Glu
65   70   75   80

Ile Ser Phe Gln Glu Phe Leu Thr Ala Ala Xaa Lys Ala Arg Ala Gly
                85   90   95

```
Leu Glu Asp Leu Xaa Val Ala Phe Arg Ala Phe Asp Gln Asp Gly Asp
        100                 105                 110

Gly His Ile Thr Val Asp Glu Leu Arg Arg Ala Xaa Ala Gly Leu Gly
        115                 120                 125

Xaa Leu Xaa Glu Ile Asp His Phe Gly
    130                 135
```

```
<210> 659
<211> 34
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 659
Pro Xaa Ser Arg Gln Asp Val Met Asp Ile Val Phe Ile Glu Gln Leu
 1               5                 10                 15

Ser Val Ile Thr Thr Ile Gly Val Tyr Asp Trp Xaa Gln Xaa Ser Asn
            20                 25                 30

Arg Ser
```

```
<210> 660
<211> 56
<212> PRT
<213> Homo sapiens

<400> 660
Asn Pro Ile Ser Pro Lys Asn Tyr Lys Lys Ile Ser Gln Ala Gln Ser
 1               5                 10                 15
```

```
Gln Leu Pro Val Ile Pro Ala Thr Gln Glu Ala Glu Ser Gly Glu Ser
          20              25              30

Leu Gly Pro Gly Ala Ala Glu Val Asn Ser Glu Pro Arg Leu His His
          35              40              45

Arg Thr Pro Ala Trp Ile Thr Lys
      50              55
```

```
<210> 661
<211> 41
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 661
Tyr Ile Gly Phe Val Ile Leu Val Phe Phe Ala Ser Ser Tyr Val Lys
  1           5               10              15

Glu Ile Asp Asn Lys Ile Leu Asn Asn Lys Lys Lys Xaa Lys Xaa Ser
          20              25              30

Ser Lys Gly Xaa Val Ala Xaa Ala Ile
          35              40
```

```
<210> 662
<211> 524
```

<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (191)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 662
Cys Glu Ala Trp Arg Gly Arg Ala Asp Pro Gly Gly Gln Ser Cys Leu
 1   5   10   15

Gln Ala Leu Gln Asn Ser Thr Ala Pro Gln His Pro Gly Leu His Arg
            20   25   30

Trp Thr Gly Asp Arg Lys Met Pro Pro Arg Arg Asp Arg Gly Cys Asp
        35   40   45

Pro Val Gly Asn Ile Pro Gln Gly Glu Ser Gly Gly Trp Trp Pro Glu
    50   55   60

Gly Ala Gly Asp Leu Leu Gly Ala Thr Pro Asp Arg Glu Ser Pro Gln
65   70   75   80

Leu Pro Gly Gln Arg Leu Gln Pro His Pro Gln Gln Cys Leu His Gly
                85   90   95

Arg Arg Val Arg Gly Pro Ser Trp Arg Val Glu Ala Trp Gly Pro Gly
            100   105   110

Leu His Val Phe Gly Pro Gly Gln Arg Trp Gly Xaa Ser Pro Gln Gly
        115   120   125

Ile Pro Glu Leu Glu Gln Tyr Asp Pro Pro Glu Leu Ala Asp Ser Ser
    130   135   140

Gly Arg Val Val Arg Glu Lys Trp Ser Ala Asp Met Trp Arg Leu Gly
145   150   155   160

Cys Leu Ile Trp Glu Val Phe Asn Gly Pro Leu Pro Arg Ala Ala Ala
                165   170   175

Leu Arg Asn Pro Gly Lys Ile Pro Lys Thr Leu Val Pro His Xaa Cys
            180   185   190

Lys Leu Val Gly Ala Asn Pro Lys Val Arg Pro Asn Pro Ala Arg Phe

```
                   195                    200                    205

    Leu Gln Asn Cys Arg Ala Pro Gly Gly Phe Met Ser Asn Arg Phe Val
        210                 215                 220

    Glu Thr Asn Leu Phe Leu Glu Glu Ile Gln Ile Lys Glu Pro Ala Glu
    225                 230                 235                 240

    Lys Gln Lys Phe Phe Gln Glu Leu Ser Lys Ser Leu Asp Ala Phe Pro
                245                 250                 255

    Glu Asp Phe Cys Arg His Lys Val Leu Pro Gln Leu Leu Thr Ala Phe
                260                 265                 270

    Glu Phe Gly Asn Ala Gly Ala Val Val Leu Thr Pro Leu Phe Lys Val
                275                 280                 285

    Gly Lys Phe Leu Ser Ala Glu Glu Tyr Gln Gln Lys Ile Ile Pro Val
        290                 295                 300

    Val Val Lys Met Phe Ser Ser Thr Asp Arg Ala Met Arg Ile Arg Leu
    305                 310                 315                 320

    Leu Gln Gln Met Glu Gln Phe Ile Gln Tyr Leu Asp Glu Pro Thr Val
                325                 330                 335

    Asn Thr Gln Ile Phe Pro His Val Val His Gly Phe Leu Asp Thr Asn
                340                 345                 350

    Pro Ala Ile Arg Glu Gln Thr Val Lys Ser Met Leu Leu Leu Ala Pro
        355                 360                 365

    Lys Leu Asn Glu Ala Asn Leu Asn Val Glu Leu Met Lys His Phe Ala
        370                 375                 380

    Arg Leu Gln Ala Lys Asp Glu Gln Gly Pro Ile Arg Cys Asn Thr Thr
    385                 390                 395                 400

    Val Cys Leu Gly Lys Ile Gly Ser Tyr Leu Ser Ala Ser Thr Arg His
                405                 410                 415

    Arg Val Leu Thr Ser Ala Phe Ser Arg Ala Thr Arg Asp Pro Phe Ala
                420                 425                 430

    Pro Ser Arg Val Ala Gly Val Leu Gly Phe Ala Ala Thr His Asn Leu
                435                 440                 445

    Tyr Ser Met Asn Asp Cys Ala Gln Lys Ile Leu Pro Val Leu Cys Gly
        450                 455                 460

    Leu Thr Val Asp Pro Glu Lys Ser Val Arg Asp Gln Ala Phe Lys Ala
```

```
    465                  470                  475                  480

    Phe Gly Ala Ser Cys Pro Asn Trp Ser Leu Cys Arg Arg Thr Arg Pro
                    485                  490                  495

    Ser Trp Arg Lys Trp Arg Arg Met Ser Met Gln Pro Pro Ala Leu Ala
                500                  505                  510

    Trp Glu Glu Pro Gln Leu Ala Gly Gln Ala Gly Pro
            515                  520
```

<210> 663
<211> 272
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 663
```
Pro Thr Leu Asp Ser Ala Arg Ser Leu Ser Met Arg Ala Pro Ser Leu
  1               5                  10                  15

Thr Pro Ser Ala Ala Pro Leu Ser Thr Trp Pro Leu Xaa Ile Leu Val
                20                  25                  30

Arg Ser Gly His Asn Arg Ala Val Asp Trp Trp Ser Leu Gly Ala Leu
            35                  40                  45

Met Tyr Asp Met Leu Thr Gly Ser Pro Pro Phe Thr Ala Glu Asn Arg
        50                  55                  60

Lys Lys Thr Met Asp Lys Ile Ile Arg Gly Lys Leu Ala Leu Pro Pro
 65                  70                  75                  80

Tyr Leu Thr Pro Asp Ala Arg Asp Leu Val Lys Lys Phe Leu Lys Arg
                85                  90                  95

Asn Pro Ser Gln Arg Ile Gly Gly Gly Pro Gly Asp Ala Ala Asp Val
            100                 105                 110

Gln Arg His Pro Phe Phe Arg His Met Asn Trp Asp Asp Leu Leu Ala
        115                 120                 125

Trp Arg Val Asp Pro Pro Phe Arg Pro Cys Leu Gln Ser Glu Glu Asp
    130                 135                 140
```

```
Val Ser Gln Phe Asp Thr Arg Phe Thr Arg Gln Thr Pro Val Asp Ser
145             150             155             160

Pro Asp Asp Thr Ala Leu Ser Glu Ser Ala Asn Gln Ala Phe Leu Gly
            165             170             175

Phe Thr Tyr Val Ala Pro Ser Val Leu Asp Ser Ile Lys Glu Gly Phe
            180             185             190

Ser Phe Gln Pro Lys Leu Arg Ser Pro Arg Arg Leu Asn Ser Ser Pro
        195             200             205

Arg Ala Pro Val Ser Pro Leu Lys Phe Ser Pro Phe Glu Gly Phe Arg
    210             215             220

Pro Ser Pro Ser Leu Pro Glu Pro Thr Glu Leu Pro Leu Pro Pro Leu
225             230             235             240

Leu Pro Pro Pro Pro Pro Ser Thr Thr Ala Pro Leu Pro Ile Arg Pro
            245             250             255

Pro Ser Gly Thr Lys Lys Ser Lys Arg Gly Arg Gly Arg Pro Gly Arg
            260             265             270
```

```
<210> 664
<211> 256
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 664
Gly Thr Arg Arg Glu Thr Trp Arg Pro Gly Ser Met Ala Gly Leu Glu
 1               5               10              15

Leu Leu Ser Asp Gln Gly Tyr Arg Val Asp Gly Arg Arg Ala Gly Glu
            20              25              30

Leu Arg Lys Ile Gln Ala Arg Met Gly Val Phe Ala Gln Ala Asp Gly
        35              40              45

Ser Ala Tyr Ile Glu Gln Gly Asn Thr Lys Ala Leu Ala Val Val Tyr
    50              55              60
```

```
Gly Pro His Glu Ile Arg Gly Ser Arg Ala Arg Ala Leu Pro Asp Arg
65              70          75              80

Ala Leu Val Asn Cys Gln Tyr Ser Ser Ala Thr Phe Ser Thr Gly Glu
            85          90              95

Arg Lys Xaa Arg Pro His Gly Asp Arg Lys Ser Cys Glu Met Gly Leu
        100         105             110

Gln Leu Arg Gln Thr Phe Glu Ala Ala Ile Leu Thr Gln Leu His Pro
        115         120             125

Arg Ser Gln Ile Asp Ile Tyr Val Gln Val Leu Gln Ala Asp Gly Gly
        130         135             140

Thr Tyr Ala Ala Cys Val Asn Ala Ala Thr Leu Ala Val Leu Asp Ala
145             150             155             160

Gly Ile Pro Met Arg Asp Phe Val Cys Ala Cys Ser Ala Gly Phe Val
            165         170             175

Asp Gly Thr Ala Leu Ala Asp Leu Ser His Val Glu Glu Ala Ala Gly
            180         185             190

Gly Pro Gln Leu Ala Leu Ala Leu Leu Pro Ala Ser Gly Gln Ile Ala
        195         200             205

Leu Leu Glu Met Asp Ala Arg Leu His Glu Asp His Leu Glu Arg Val
    210         215             220

Leu Glu Ala Ala Ala Gln Ala Ala Arg Asp Val His Thr Leu Leu Asp
225             230             235             240

Arg Val Val Arg Gln His Val Arg Glu Ala Ser Ile Leu Leu Gly Asp
            245         250             255
```

<210> 665
<211> 241
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (122)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 665

```
Pro Arg Gly Asp Lys Ala Arg Thr Xaa Pro Pro Ala Ala Ser Ala Arg
 1               5               10              15

Pro Ser Arg Ser Lys Arg Gly Gly Glu Glu Arg Val Leu Glu Lys Glu
            20              25              30

Glu Glu Glu Asp Asp Asp Glu Asp Glu Asp Glu Glu Asp Asp Val Ser
        35              40              45

Glu Gly Ser Glu Val Pro Glu Ser Asp Arg Pro Ala Gly Ala Gln His
    50              55              60

His Gln Leu Asn Gly Glu Arg Gly Pro Gln Ser Ala Lys Glu Arg Val
65              70              75              80

Lys Glu Trp Thr Pro Cys Gly Pro His Gln Gly Gln Asp Glu Gly Arg
                85              90              95

Gly Pro Ala Pro Gly Ser Gly Thr Arg Gln Val Phe Ser Met Ala Ala
            100             105             110

Met Asn Lys Glu Gly Gly Thr Ala Ser Xaa Ala Thr Gly Pro Asp Ser
        115             120             125

Pro Ser Pro Val Pro Leu Pro Pro Gly Lys Pro Ala Leu Pro Gly Ala
    130             135             140

Asp Gly Thr Pro Phe Gly Cys Pro Pro Gly Arg Lys Glu Lys Pro Ser
145             150             155             160

Asp Pro Val Glu Trp Thr Val Met Asp Val Val Glu Tyr Phe Thr Glu
                165             170             175

Ala Gly Phe Pro Glu Gln Ala Thr Val Phe Gln Glu Gln Glu Ile Asp
            180             185             190

Gly Lys Ser Leu Leu Leu Met Gln Arg Thr Asp Val Leu Thr Gly Leu
        195             200             205

Ser Ile Arg Leu Gly Pro Ala Leu Lys Ile Tyr Glu His His Ile Lys
    210             215             220

Val Leu Gln Gln Gly His Phe Glu Asp Asp Asp Pro Asp Gly Phe Leu
225             230             235             240
```

Gly


```
<210> 666
<211> 131
<212> PRT
<213> Homo sapiens

<400> 666
Val Thr Gly Gly Gly Ala Val Val Leu Gly Ala Glu Ser His Ala Ser
  1               5                  10                  15


Lys Asp Val Ala Ile Asp Met Met Asp Ser Arg Thr Ser Gln Gln Leu
             20                  25                  30


Gln Leu Ile Asp Glu Gln Asp Ser Tyr Ile Gln Ser Arg Ala Asp Thr
         35                  40                  45


Met Gln Asn Ile Glu Ser Thr Ile Val Glu Leu Gly Ser Ile Phe Gln
     50                  55                  60


Gln Leu Ala His Met Val Lys Glu Gln Glu Glu Thr Ile Gln Arg Ile
 65                  70                  75                  80


Asp Glu Asn Val Leu Gly Ala Gln Leu Asp Val Glu Ala Ala His Ser
                 85                  90                  95


Glu Ile Leu Lys Tyr Phe Gln Ser Val Thr Ser Asn Arg Trp Leu Met
             100                 105                 110


Val Lys Ile Phe Leu Ile Leu Ile Val Phe Phe Ile Ile Phe Val Val
         115                 120                 125


Phe Leu Ala
     130



<210> 667
<211> 652
<212> PRT
<213> Homo sapiens

<400> 667
Leu Ser Trp Asn Arg Tyr Thr Ser Val Ser Pro Leu His Arg Ser Leu
  1               5                  10                  15


Gln Leu Pro Pro Arg Val Ser Gly Val Arg Cys Asp Gln Cys Ala Arg
```

634

<pre>
                    20   25   30

     Gly Phe Ser Gly Ile Phe Pro Ala Cys His Pro Cys His Ala Cys Phe
             35   40   45

     Gly Asp Trp Asp Arg Val Val Gln Asp Leu Ala Ala Arg Thr Gln Arg
         50   55   60

     Leu Glu Gln Arg Ala Gln Glu Leu Gln Gln Thr Gly Val Leu Gly Ala
     65   70   75   80

     Phe Glu Ser Ser Phe Trp His Met Gln Glu Lys Leu Gly Ile Val Gln
                     85   90   95

     Gly Ile Val Gly Ala Arg Asn Thr Ser Ala Ala Ser Thr Ala Gln Leu
                100   105   110

     Val Glu Ala Thr Glu Glu Leu Arg Arg Glu Ile Gly Glu Ala Thr Glu
             115   120   125

     His Leu Thr Gln Leu Glu Ala Asp Leu Thr Asp Val Gln Asp Glu Asn
         130   135   140

     Phe Asn Ala Asn His Ala Leu Ser Gly Leu Glu Arg Asp Arg Leu Ala
     145   150   155   160

     Leu Asn Leu Thr Leu Arg Gln Leu Asp Gln His Leu Asp Leu Leu Lys
                165   170   175

     His Ser Asn Phe Leu Gly Ala Tyr Asp Ser Ile Arg His Ala His Ser
                180   185   190

     Gln Ser Ala Glu Ala Glu Arg Arg Ala Asn Thr Ser Ala Leu Ala Val
             195   200   205

     Pro Ser Pro Val Ser Asn Ser Ala Ser Ala Arg His Arg Thr Glu Ala
         210   215   220

     Leu Met Asp Ala Gln Lys Glu Asp Phe Asn Ser Lys His Met Ala Asn
     225   230   235   240

     Gln Arg Ala Leu Gly Lys Leu Ser Ala His Thr His Thr Leu Ser Leu
                245   250   255

     Thr Asp Ile Asn Glu Leu Val Cys Gly Ala Pro Gly Asp Ala Pro Cys
                260   265   270

     Ala Thr Ser Pro Cys Gly Gly Ala Gly Cys Arg Asp Glu Asp Gly Gln
             275   280   285

     Pro Arg Cys Gly Gly Leu Ser Cys Asn Gly Ala Ala Ala Thr Ala Asp
</pre>

```
            290                295                300

Leu Ala Leu Gly Arg Ala Arg His Thr Gln Ala Glu Leu Gln Arg Ala
305                310                315                320

Leu Ala Glu Gly Gly Ser Ile Leu Ser Arg Val Ala Glu Thr Arg Arg
                325                330                335

Gln Ala Ser Glu Ala Gln Gln Arg Ala Gln Ala Ala Leu Asp Lys Ala
                340                345                350

Asn Ala Ser Arg Gly Gln Val Glu Gln Ala Asn Gln Glu Leu Gln Glu
                355                360                365

Leu Ile Gln Ser Val Lys Asp Phe Leu Asn Gln Glu Gly Ala Asp Pro
                370                375                380

Asp Ser Ile Glu Met Val Ala Thr Arg Val Leu Glu Leu Ser Ile Pro
385                390                395                400

Ala Ser Ala Glu Gln Ile Gln His Leu Ala Gly Ala Ile Ala Glu Arg
                405                410                415

Val Arg Ser Leu Ala Asp Val Asp Ala Ile Leu Ala Arg Thr Val Gly
                420                425                430

Asp Val Arg Arg Ala Glu Gln Leu Leu Gln Asp Ala Arg Arg Ala Arg
                435                440                445

Ser Trp Ala Glu Asp Glu Lys Gln Lys Ala Glu Thr Val Gln Ala Ala
                450                455                460

Leu Glu Glu Ala Gln Arg Ala Gln Gly Ile Ala Gln Gly Ala Ile Arg
465                470                475                480

Gly Ala Val Ala Asp Thr Arg Asp Thr Glu Gln Thr Leu Tyr Gln Val
                485                490                495

Gln Glu Arg Met Ala Gly Ala Glu Arg Ala Leu Ser Ser Ala Gly Glu
                500                505                510

Arg Ala Arg Gln Leu Asp Ala Leu Leu Glu Ala Leu Lys Leu Lys Arg
                515                520                525

Ala Gly Asn Ser Leu Ala Ala Ser Thr Ala Glu Glu Thr Ala Gly Ser
                530                535                540

Ala Gln Gly Arg Ala Gln Glu Ala Glu Gln Leu Leu Arg Gly Pro Leu
545                550                555                560

Gly Asp Gln Tyr Gln Thr Val Lys Ala Leu Ala Glu Arg Lys Ala Gln
```

636

```
                565                    570                    575
    Gly Val Leu Ala Ala Gln Ala Arg Ala Glu Gln Leu Arg Asp Glu Ala
            580                    585                    590

    Arg Asp Leu Leu Gln Ala Ala Gln Asp Lys Leu Gln Arg Leu Gln Glu
            595                    600                    605

    Leu Glu Gly Thr Tyr Glu Glu Asn Glu Arg Ala Leu Glu Ser Lys Ala
        610                    615                    620

    Ala Gln Leu Asp Gly Leu Glu Ala Arg Met Arg Ser Val Leu Gln Ala
    625                    630                    635                    640

    Ile Asn Leu Gln Val Gln Ile Tyr Asn Thr Cys Gln
                645                    650
```

```
<210> 668
<211> 406
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 668
Gly Ala Val Arg Ser Ser Cys Ala Glu Leu Gln Ala Arg Val Met Ala
  1               5                  10                  15

Ala Leu Arg Gln Pro Gln Val Ala Glu Cys Trp Pro Arg Pro Gly Glu
            20                  25                  30

Pro Ser Gly Arg Ser Ser Gly Pro Ser Pro Ser Trp Pro Cys Gln Arg
        35                  40                  45

Arg Ala Ala Cys Asn Leu Ile Gly Glu His Thr Asp Tyr Asn Gln Gly
        50                  55                  60

Leu Val Leu Pro Met Ala Leu Glu Leu Met Thr Val Leu Val Gly Ser
65                  70                  75                  80

Pro Arg Lys Xaa Gly Leu Val Ser Leu Leu Thr Thr Ser Glu Gly Ala
                85                  90                  95

Asp Glu Pro Gln Arg Leu Gln Phe Pro Leu Pro Thr Ala Gln Arg Ser
            100                 105                 110
```

```
Leu Glu Pro Gly Thr Pro Arg Trp Ala Asn Tyr Val Lys Gly Val Ile
        115             120             125

Gln Tyr Tyr Pro Ala Ala Pro Leu Pro Gly Phe Ser Ala Val Val Val
        130             135             140

Ser Ser Val Pro Leu Gly Gly Gly Leu Ser Ser Ser Ala Ser Leu Glu
145             150             155             160

Val Ala Thr Tyr Thr Phe Leu Gln Gln Leu Cys Pro Asp Ser Gly Thr
                165             170             175

Ile Ala Ala Arg Ala Gln Val Cys Gln Gln Ala Glu His Ser Phe Ala
            180             185             190

Gly Met Pro Cys Gly Ile Met Asp Gln Phe Ile Ser Leu Met Gly Gln
        195             200             205

Lys Gly His Ala Leu Leu Ile Asp Cys Arg Ser Leu Glu Thr Ser Leu
        210             215             220

Val Pro Leu Ser Asp Pro Lys Leu Ala Val Leu Ile Thr Asn Ser Asn
225             230             235             240

Val Arg His Ser Leu Ala Ser Ser Glu Tyr Pro Val Arg Arg Arg Gln
            245             250             255

Cys Glu Glu Val Ala Arg Ala Leu Gly Lys Glu Ser Leu Arg Glu Val
            260             265             270

Gln Leu Glu Glu Leu Glu Ala Ala Arg Asp Leu Val Ser Lys Glu Gly
        275             280             285

Phe Arg Arg Ala Arg His Val Val Gly Glu Ile Arg Arg Thr Ala Gln
        290             295             300

Ala Ala Ala Ala Leu Arg Arg Gly Asp Tyr Arg Ala Phe Gly Arg Leu
305             310             315             320

Met Val Glu Ser His Arg Ser Leu Arg Asp Asp Tyr Glu Val Ser Cys
                325             330             335

Pro Glu Leu Asp Gln Leu Val Glu Ala Ala Leu Ala Val Pro Gly Val
            340             345             350

Tyr Gly Ser Arg Met Thr Gly Gly Gly Phe Gly Gly Cys Thr Val Thr
        355             360             365

Leu Leu Glu Ala Ser Ala Ala Pro His Ala Met Arg His Ile Gln Glu
        370             375             380
```

638

```
     His Tyr Gly Gly Thr Ala Thr Phe Tyr Leu Ser Gln Ala Ala Asp Gly
     385                 390             395                 400

     Ala Lys Val Leu Cys Leu
                     405




     <210> 669
     <211> 86
     <212> PRT
     <213> Homo sapiens

     <400> 669
     Pro Glu Pro Thr Val Val Met Ala Ala Arg Ala Leu Cys Met Leu Gly
      1               5                 10                  15

     Leu Val Leu Ala Leu Leu Ser Ser Ser Ser Ala Glu Glu Tyr Val Gly
                 20                 25                  30

     Leu Ser Ala Asn Gln Cys Ala Val Pro Ala Lys Asp Arg Val Asp Cys
             35                 40                 45

     Gly Tyr Pro His Val Thr Pro Lys Glu Cys Asn Asn Arg Gly Cys Cys
         50                 55                 60

     Phe Asp Ser Arg Ile Pro Gly Val Pro Trp Cys Phe Lys Pro Leu Gln
      65                 70                 75                  80

     Glu Ala Glu Cys Thr Phe
                     85




     <210> 670
     <211> 392
     <212> PRT
     <213> Homo sapiens

     <220>
     <221> SITE
     <222> (6)
     <223> Xaa equals any of the naturally occurring L-amino acids

     <400> 670
     Gly Gly Gly Ala Arg Xaa Ser Pro Ala Thr Gln Pro Pro Pro Leu Leu
      1               5                 10                  15

     Pro Pro Ser Ala Thr Gly Pro Asp Ala Thr Val Gly Gly Pro Ala Pro
                 20                 25                 30
```

```
Thr Pro Leu Leu Pro Pro Ser Ala Thr Ala Ser Val Lys Met Glu Pro
     35                40                45

Glu Asn Lys Tyr Leu Pro Glu Leu Met Ala Glu Lys Asp Ser Leu Asp
     50                55                60

Pro Ser Phe Thr His Ala Met Gln Leu Leu Thr Ala Glu Ile Glu Lys
 65                70                75                80

Ile Gln Lys Gly Asp Ser Lys Lys Asp Asp Glu Glu Asn Tyr Leu Asp
             85                90                95

Leu Phe Ser His Lys Asn Met Lys Leu Lys Glu Arg Val Leu Ile Pro
             100               105               110

Val Lys Gln Tyr Pro Lys Phe Asn Phe Val Gly Lys Ile Leu Gly Pro
     115               120               125

Gln Gly Asn Thr Ile Lys Arg Leu Gln Glu Glu Thr Gly Ala Lys Ile
     130               135               140

Ser Val Leu Gly Lys Gly Ser Met Arg Asp Lys Ala Lys Glu Glu Glu
145               150               155               160

Leu Arg Lys Gly Gly Asp Pro Lys Tyr Ala His Leu Asn Met Asp Leu
             165               170               175

His Val Phe Ile Glu Val Phe Gly Pro Pro Cys Glu Ala Tyr Ala Leu
             180               185               190

Met Ala His Ala Met Glu Glu Val Lys Lys Phe Leu Val Pro Asp Met
     195               200               205

Met Asp Asp Ile Cys Gln Glu Gln Phe Leu Glu Leu Ser Tyr Leu Asn
     210               215               220

Gly Val Pro Glu Pro Ser Arg Gly Arg Gly Val Pro Val Arg Gly Arg
225               230               235               240

Gly Ala Ala Pro Pro Pro Pro Val Pro Arg Gly Arg Gly Val Gly
             245               250               255

Pro Pro Arg Gly Ala Leu Val Arg Gly Thr Pro Val Arg Gly Ala Ile
             260               265               270

Thr Arg Gly Ala Thr Val Thr Arg Gly Val Pro Pro Pro Thr Val
     275               280               285

Arg Gly Ala Pro Ala Pro Arg Ala Arg Thr Ala Gly Ile Gln Arg Ile
     290               295               300
```

```
Pro Leu Pro Pro Pro Pro Ala Pro Glu Thr Tyr Glu Glu Tyr Gly Tyr
305              310              315              320

Asp Asp Thr Tyr Ala Glu Gln Ser Tyr Glu Gly Tyr Glu Gly Tyr Tyr
                 325              330              335

Ser Gln Ser Gln Gly Asp Ser Glu Tyr Tyr Asp Tyr Gly His Gly Glu
             340              345              350

Val Gln Asp Ser Tyr Glu Ala Tyr Gly Gln Asp Asp Trp Asn Gly Thr
             355              360              365

Arg Pro Ser Leu Lys Ala Pro Pro Ala Arg Pro Val Lys Gly Ala Tyr
370              375              380

Arg Glu His Pro Tyr Gly Arg Tyr
385              390
```

```
<210> 671
<211> 180
<212> PRT
<213> Homo sapiens

<400> 671
Arg Asn Met Ser Ser Phe Ser Arg Ala Pro Gln Gln Trp Ala Thr Phe
1               5               10              15

Ala Arg Ile Trp Tyr Leu Leu Asp Gly Lys Met Gln Pro Pro Gly Lys
            20              25              30

Leu Ala Ala Met Ala Ser Ile Arg Leu Gln Gly Leu His Lys Pro Val
        35              40              45

Tyr His Ala Leu Ser Asp Cys Gly Asp His Val Val Ile Met Asn Thr
    50              55              60

Arg His Ile Ala Phe Ser Gly Asn Lys Trp Glu Gln Lys Val Tyr Ser
65              70              75              80

Ser His Thr Gly Tyr Pro Gly Gly Phe Arg Gln Val Thr Ala Ala Gln
                85              90              95

Leu His Leu Arg Asp Pro Val Ala Ile Val Lys Leu Ala Ile Tyr Gly
            100             105             110

Met Leu Pro Lys Asn Leu His Arg Arg Thr Met Met Glu Arg Leu His
        115             120             125

Leu Phe Pro Asp Glu Tyr Ile Pro Glu Asp Ile Leu Lys Asn Leu Val
```

641

```
              130                135                140

Glu Glu Leu Pro Gln Pro Arg Lys Ile Pro Lys Arg Leu Asp Glu Tyr
145                 150                155                160

Thr Gln Glu Glu Ile Asp Ala Phe Pro Arg Leu Trp Thr Pro Pro Glu
                165                170                175

Asp Tyr Arg Leu
            180
```


<210> 672
<211> 78
<212> PRT
<213> Homo sapiens

<400> 672
```
Glu Asn Tyr Gln Phe Thr Tyr Arg Arg Phe Phe Phe Pro Asn Ser Arg
  1               5                10                15

Phe His Pro Arg Pro Phe Glu Glu Leu Gln Thr Leu Ser Leu Arg Lys
              20                25                30

Glu Arg Gly Gln Pro Lys Ile Asn Ala Lys Phe Ala Tyr Thr Pro Ser
          35                40                45

His Ser Asp Val Leu Val Val Thr Tyr Tyr Gln Cys Gly Arg Glu Pro
      50                55                60

Lys Leu His Phe Arg Ser Lys Tyr Ser Leu Cys Arg Tyr Cys
65                  70                75
```


<210> 673
<211> 139
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (113)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 673

Pro	Thr	Arg	Pro	Pro	Leu	Cys	Arg	Gly	Ala	Ala	Ser	Arg	Gly	Leu	Leu
1				5					10					15	

Cys	Lys	Trp	Ala	Pro	Trp	Pro	Ser	Ala	Pro	Val	Pro	Ala	Thr	Arg	Asp
			20				25					30			

Arg	Ala	Pro	Arg	Pro	Ala	Arg	Gly	Arg	Arg	Pro	Gly	Arg	Leu	Gly	Ser
	35					40					45				

Thr	Ser	Ser	Asn	Ser	Ser	Cys	Ser	Ser	Thr	Glu	Cys	Pro	Gly	Glu	Ala
	50				55					60					

Ile	Pro	His	Pro	Pro	Gly	Leu	Pro	Lys	Ala	Asp	Pro	Gly	His	Trp	Trp
65					70				75					80	

Ala	Ser	Phe	Phe	Phe	Gly	Lys	Ser	Thr	Leu	Pro	Phe	Met	Ala	Thr	Val
			85					90					95		

Leu	Glu	Ser	Ala	Glu	His	Ser	Glu	Pro	Pro	Gln	Ala	Ser	Ser	Ser	Met
		100					105					110			

Xaa	Ala	Cys	Gly	Leu	Ala	Arg	Glu	Ala	Pro	Arg	Lys	Gln	Pro	Gly	Gly
	115					120					125				

Gln	Ser	Ser	Xaa	Ala	Ser	Ala	Gly	Pro	Pro	Ser
	130				135					

<210> 674
<211> 279
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (193)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 674

643

```
Glu Arg Ala His Ser Leu Xaa His Gly Val Asp Gly Glu Pro Cys Pro
 1               5               10                  15

Glu Asp Tyr Lys Tyr Ile Ser Glu Asn Cys Glu Thr Ser Thr Met Asn
                20              25              30

Ile Asp Arg Asn Ile Thr His Leu Gln His Cys Thr Phe Val Asp Asp
            35              40              45

Cys Ser Ser Ser Asn Cys Leu Cys Gly Xaa Phe Ser Ile Arg Cys Trp
    50              55              60

Tyr Asp Lys Asp Gly Arg Leu Leu Gln Glu Phe Asn Lys Ile Glu Pro
65              70              75                  80

Pro Leu Ile Phe Glu Cys Asn Gln Ala Cys Ser Cys Trp Arg Asn Cys
            85              90              95

Lys Asn Arg Val Val Gln Ser Gly Ile Lys Val Arg Leu Gln Leu Tyr
            100             105             110

Arg Thr Ala Lys Met Gly Trp Gly Val Arg Ala Leu Gln Thr Ile Pro
        115             120             125

Gln Gly Thr Phe Ile Cys Glu Tyr Val Gly Glu Leu Ile Ser Asp Ala
    130             135             140

Glu Ala Asp Val Arg Glu Asp Asp Ser Tyr Leu Phe Asp Leu Asp Asn
145             150             155                 160

Lys Asp Gly Glu Val Tyr Cys Ile Asp Ala Arg Tyr Tyr Gly Asn Ile
            165             170             175

Ser Arg Phe Ile Asn His Leu Cys Asp Pro Asn Ile Ile Pro Val Arg
            180             185             190

Xaa Phe Met Leu His Gln Asp Leu Arg Phe Pro Arg Ile Ala Phe Phe
        195             200             205

Ser Ser Arg Asp Ile Arg Thr Gly Glu Glu Leu Gly Phe Asp Tyr Gly
    210             215             220

Asp Arg Phe Trp Asp Ile Lys Ser Lys Tyr Phe Thr Cys Gln Cys Gly
225             230             235             240

Ser Glu Lys Cys Lys His Ser Ala Glu Ala Ile Ala Leu Glu Gln Ser
            245             250             255

Arg Leu Ala Arg Leu Asp Pro His Pro Glu Leu Leu Pro Glu Leu Gly
            260             265             270
```

644

```
        Ser Leu Pro Pro Val Asn Thr
                275


        <210> 675
        <211> 405
        <212> PRT
        <213> Homo sapiens

        <220>
        <221> SITE
        <222> (393)
        <223> Xaa equals any of the naturally occurring L-amino acids

        <220>
        <221> SITE
        <222> (394)
        <223> Xaa equals any of the naturally occurring L-amino acids

        <400> 675
        Arg Asn Thr Leu Gly Arg Gly Thr Thr Ile Thr Leu Val Leu Lys Glu
         1               5                  10                  15


        Glu Ala Ser Asp Tyr Leu Glu Leu Asp Thr Ile Lys Asn Leu Val Lys
                    20                  25                  30


        Lys Tyr Ser Gln Phe Ile Asn Phe Pro Ile Tyr Val Trp Ser Ser Lys
                    35                  40                  45


        Thr Glu Thr Val Glu Glu Pro Met Glu Glu Glu Glu Ala Ala Lys Glu
            50                  55                  60


        Glu Lys Glu Glu Ser Asp Asp Glu Ala Ala Val Glu Glu Glu Glu Glu
        65                  70                  75                  80


        Glu Lys Lys Pro Lys Thr Lys Lys Val Glu Lys Thr Val Trp Asp Trp
                        85                  90                  95


        Glu Leu Met Asn Asp Ile Lys Pro Ile Trp Gln Arg Pro Ser Lys Glu
                    100                 105                 110


        Val Glu Glu Asp Glu Tyr Lys Ala Phe Tyr Lys Ser Phe Ser Lys Glu
                    115                 120                 125


        Ser Asp Asp Pro Met Ala Tyr Ile His Phe Thr Ala Glu Gly Glu Val
            130                 135                 140


        Thr Phe Lys Ser Ile Leu Phe Val Pro Thr Ser Ala Pro Arg Gly Leu
        145                 150                 155                 160
```

```
Phe Asp Glu Tyr Gly Ser Lys Lys Ser Asp Tyr Ile Lys Leu Tyr Val
            165                 170                 175

Arg Arg Val Phe Ile Thr Asp Asp Phe His Asp Met Met Pro Lys Tyr
            180                 185                 190

Leu Asn Phe Val Lys Gly Val Val Asp Ser Asp Asp Leu Pro Leu Asn
            195                 200                 205

Val Ser Arg Glu Thr Leu Gln Gln His Lys Leu Leu Lys Val Ile Arg
    210                 215                 220

Lys Lys Leu Val Arg Lys Thr Leu Asp Met Ile Lys Lys Ile Ala Asp
225                 230                 235                 240

Asp Lys Tyr Asn Asp Thr Phe Trp Lys Glu Phe Gly Thr Asn Ile Lys
                245                 250                 255

Leu Gly Val Ile Glu Asp His Ser Asn Arg Thr Arg Leu Ala Lys Leu
            260                 265                 270

Leu Arg Phe Gln Ser Ser His His Pro Thr Asp Ile Thr Ser Leu Asp
            275                 280                 285

Gln Tyr Val Glu Arg Met Lys Glu Lys Gln Asp Lys Ile Tyr Phe Met
    290                 295                 300

Ala Gly Ser Ser Arg Lys Glu Ala Glu Ser Ser Pro Phe Val Glu Arg
305                 310                 315                 320

Leu Leu Lys Lys Gly Tyr Glu Val Ile Tyr Leu Thr Glu Pro Val Asp
            325                 330                 335

Glu Tyr Cys Ile Gln Ala Leu Pro Glu Phe Asp Gly Lys Arg Phe Gln
            340                 345                 350

Asn Val Ala Lys Glu Gly Val Lys Phe Asp Glu Ser Glu Lys Thr Lys
            355                 360                 365

Glu Ser Arg Glu Ala Val Glu Lys Glu Phe Glu Pro Leu Leu Asn Trp
    370                 375                 380

Met Lys Asp Lys Ala Leu Lys Gly Xaa Xaa Leu Trp Glu Ile Leu Pro
385                 390                 395                 400

Ile Cys Gly Lys Tyr
                405
```

<210> 676

```
<211> 465
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 676
Asn Asp Ser Leu Xaa Xaa Lys Ala Gly Thr Pro Ala Gly Asn Arg Xaa
  1               5              10              15

Gly Ile Pro Gly Ser Thr His Ala Ser Ala Ala Ala Pro Phe Ala Ala
            20              25              30

Ala Leu Ala Arg Asp Pro Asn Pro Ala Ser Pro Leu Pro Glu His Arg
        35              40              45

Pro Arg Leu His Arg Gly Pro Gly Pro Pro Ala Arg Leu Ala Ala Ala
    50              55              60

Met Ala Asp Pro Lys Tyr Ala Asp Leu Pro Gly Ile Ala Arg Asn Glu
 65              70              75              80

Pro Asp Val Tyr Glu Thr Ser Asp Leu Pro Glu Asp Asp Gln Ala Glu
            85              90              95

Phe Asp Ala Glu Glu Leu Thr Ser Thr Ser Val Glu His Ile Ile Val
            100             105             110

Asn Pro Asn Ala Ala Tyr Asp Lys Phe Lys Asp Lys Arg Val Gly Thr
        115             120             125

Lys Gly Leu Asp Phe Ser Asp Arg Ile Gly Lys Thr Lys Arg Thr Gly
    130             135             140

Tyr Glu Ser Gly Glu Tyr Glu Met Leu Gly Glu Gly Leu Gly Val Lys
145             150             155             160

Glu Thr Pro Gln Gln Lys Tyr Gln Arg Leu Leu His Glu Val Gln Glu
```

```
                165                  170                  175

Leu Thr Thr Glu Val Glu Lys Ile Lys Thr Thr Val Lys Glu Ser Ala
            180             185             190

Thr Glu Glu Lys Leu Thr Pro Val Leu Leu Ala Lys Gln Leu Ala Ala
            195             200             205

Leu Lys Gln Gln Leu Val Ala Ser His Leu Glu Lys Leu Leu Gly Pro
    210             215             220

Asp Ala Ala Ile Asn Leu Thr Asp Pro Asp Gly Ala Leu Ala Lys Arg
225             230             235             240

Leu Leu Leu Gln Leu Glu Ala Thr Lys Asn Ser Lys Gly Gly Ser Gly
            245             250             255

Gly Lys Thr Thr Gly Thr Pro Pro Asp Ser Ser Leu Val Thr Tyr Glu
            260             265             270

Leu His Ser Arg Pro Glu Gln Asp Lys Phe Ser Gln Ala Ala Lys Val
            275             280             285

Ala Glu Leu Glu Lys Arg Leu Thr Glu Leu Glu Thr Ala Val Arg Cys
    290             295             300

Asp Gln Asp Ala Gln Asn Pro Leu Ser Ala Gly Leu Gln Gly Ala Cys
305             310             315             320

Leu Met Glu Thr Val Glu Leu Leu Gln Ala Lys Val Ser Ala Leu Asp
            325             330             335

Leu Ala Val Leu Asp Gln Val Glu Ala Arg Leu Gln Ser Val Leu Gly
            340             345             350

Lys Val Asn Glu Ile Ala Lys His Lys Ala Ser Val Glu Asp Ala Asp
            355             360             365

Thr Gln Ser Lys Val His Gln Leu Tyr Glu Thr Ile Gln Arg Trp Ser
    370             375             380

Pro Ile Ala Ser Thr Leu Pro Glu Leu Val Gln Arg Leu Val Thr Ile
385             390             395             400

Lys Gln Leu His Glu Gln Ala Met Gln Phe Gly Gln Leu Leu Thr His
            405             410             415

Leu Asp Thr Thr Gln Gln Met Ile Ala Asn Ser Leu Lys Asp Asn Thr
            420             425             430

Thr Leu Leu Thr Gln Val Gln Thr Thr Met Arg Glu Asn Leu Ala Thr
```

648

```
        435            440            445

Val Glu Gly Asn Phe Ala Ser Ile Asp Glu Arg Met Lys Lys Leu Gly
    450            455            460

Lys
465
```

```
<210> 677
<211> 48
<212> PRT
<213> Homo sapiens

<400> 677
Ser Ser Phe Leu Asn Ser Asp Leu Gly Leu Ser Leu Ala Arg Asn Leu
  1           5              10              15

Ala Phe Ser Phe Thr Thr Lys Glu Arg Asp Gln Lys Pro Leu Ile Phe
            20              25              30

Asn Phe His Lys Met Leu Glu Val Tyr Ile Tyr Ile Tyr Ile Phe Leu
        35              40              45
```

```
<210> 678
<211> 940
<212> PRT
<213> Homo sapiens

<400> 678
Val Leu Gly Glu Gly Ile Ser Phe Leu Leu Ser Pro Pro Leu Pro Thr
  1           5              10              15

Pro Ser Ile Asn Ile Ile Leu Leu Lys Ile Leu Arg Cys Gln Ala Ala
            20              25              30

Lys Val Glu Ser Ala Ile Ala Glu Gly Gly Ala Ser Arg Phe Ser Ala
        35              40              45

Ser Ser Gly Gly Gly Gly Ser Arg Gly Ala Pro Gln His Tyr Pro Lys
    50              55              60

Thr Ala Gly Asn Ser Glu Phe Leu Gly Lys Thr Pro Gly Gln Asn Ala
65              70              75              80
```

Gln Lys Trp Ile Pro Ala Arg Ser Thr Arg Arg Asp Asp Asn Ser Ala
                85   90   95

Ala Asn Asn Ser Ala Asn Glu Lys Glu Arg His Asp Ala Ile Phe Arg
            100   105   110

Lys Val Arg Gly Ile Leu Asn Lys Leu Thr Pro Glu Lys Phe Asp Lys
        115   120   125

Leu Cys Leu Glu Leu Leu Asn Val Gly Val Glu Ser Lys Leu Ile Leu
    130   135   140

Lys Gly Val Ile Leu Leu Ile Val Asp Lys Ala Leu Glu Glu Pro Lys
145   150   155   160

Tyr Ser Ser Leu Tyr Ala Gln Leu Cys Leu Arg Leu Ala Glu Asp Ala
                165   170   175

Pro Asn Phe Asp Gly Pro Ala Ala Glu Gly Gln Pro Gly Gln Lys Gln
            180   185   190

Ser Thr Thr Phe Arg Arg Leu Leu Ile Ser Lys Leu Gln Asp Glu Phe
            195   200   205

Glu Asn Arg Thr Arg Asn Val Asp Val Tyr Asp Lys Arg Glu Asn Pro
    210   215   220

Leu Leu Pro Glu Glu Glu Glu Gln Arg Ala Ile Ala Lys Ile Lys Met
225   230   235   240

Leu Gly Asn Ile Lys Phe Ile Gly Glu Leu Gly Lys Leu Asp Leu Ile
                245   250   255

His Glu Ser Ile Leu His Lys Cys Ile Lys Thr Leu Leu Glu Lys Lys
            260   265   270

Lys Arg Val Gln Leu Lys Asp Met Gly Glu Asp Leu Glu Cys Leu Cys
        275   280   285

Gln Ile Met Arg Thr Val Gly Pro Arg Leu Asp His Glu Arg Ala Lys
    290   295   300

Ser Leu Met Asp Gln Tyr Phe Ala Arg Met Cys Ser Leu Met Leu Ser
305   310   315   320

Lys Glu Leu Pro Ala Arg Ile Arg Phe Leu Leu Gln Asp Thr Val Glu
                325   330   335

Leu Arg Glu His His Trp Val Pro Arg Lys Ala Phe Leu Asp Asn Gly
            340   345   350

650

```
Pro Lys Thr Ile Asn Gln Ile Arg Gln Asp Ala Val Lys Asp Leu Gly
    355              360           365

Val Phe Ile Pro Ala Pro Met Ala Gln Gly Met Arg Ser Asp Phe Phe
    370           375           380

Leu Glu Gly Pro Phe Met Pro Pro Arg Met Lys Met Asp Arg Asp Pro
385           390           395                   400

Leu Gly Gly Leu Ala Asp Met Phe Gly Gln Met Pro Gly Ser Gly Ile
              405           410                   415

Gly Thr Gly Pro Gly Val Ile Gln Asp Arg Phe Ser Pro Thr Met Gly
          420           425           430

Arg His Arg Ser Asn Gln Leu Phe Asn Gly His Gly Gly His Ile Met
    435              440           445

Pro Pro Thr Gln Ser Gln Phe Gly Glu Met Gly Gly Lys Phe Met Lys
    450           455           460

Ser Gln Gly Leu Ser Gln Leu Tyr His Asn Gln Ser Gln Gly Leu Leu
465              470           475                   480

Ser Gln Leu Gln Gly Gln Ser Lys Asp Met Pro Pro Arg Phe Ser Lys
              485              490                   495

Lys Gly Gln Leu Asn Ala Asp Glu Ile Ser Leu Arg Pro Ala Gln Ser
          500           505           510

Phe Leu Met Asn Lys Asn Gln Val Pro Lys Leu Gln Pro Gln Ile Thr
    515           520           525

Met Ile Pro Pro Ser Ala Gln Pro Pro Arg Thr Gln Thr Pro Pro Leu
    530           535           540

Gly Gln Thr Pro Gln Leu Gly Leu Lys Thr Asn Pro Pro Leu Ile Gln
545           550           555                   560

Glu Lys Pro Ala Lys Thr Ser Lys Lys Pro Pro Pro Ser Lys Glu Glu
              565           570                   575

Leu Leu Lys Leu Thr Glu Thr Val Val Thr Glu Tyr Leu Asn Ser Gly
          580           585           590

Asn Ala Asn Glu Ala Val Asn Gly Val Arg Glu Met Arg Ala Pro Lys
    595           600           605

His Phe Leu Pro Glu Met Leu Ser Lys Val Ile Ile Leu Ser Leu Asp
    610           615           620
```

651

Arg Ser Asp Glu Asp Lys Glu Lys Ala Ser Ser Leu Ile Ser Leu Leu
625   630   635   640

Lys Gln Glu Gly Ile Ala Thr Ser Asp Asn Phe Met Gln Ala Phe Leu
                645   650   655

Asn Val Leu Asp Gln Cys Pro Lys Leu Glu Val Asp Ile Pro Leu Val
            660   665   670

Lys Ser Tyr Leu Ala Gln Phe Ala Ala Arg Ala Ile Ile Ser Glu Leu
        675   680   685

Val Ser Ile Ser Glu Leu Ala Gln Pro Leu Glu Ser Gly Thr His Phe
    690   695   700

Pro Leu Phe Leu Leu Cys Leu Gln Gln Leu Ala Lys Leu Gln Asp Arg
705   710   715   720

Glu Trp Leu Thr Glu Leu Phe Gln Gln Ser Lys Val Asn Met Gln Lys
            725   730   735

Met Leu Pro Glu Ile Asp Gln Asn Lys Asp Arg Met Leu Glu Ile Leu
            740   745   750

Glu Gly Lys Gly Leu Ser Phe Leu Phe Pro Leu Leu Lys Leu Glu Lys
        755   760   765

Glu Leu Leu Lys Gln Ile Lys Leu Asp Pro Ser Pro Gln Thr Ile Tyr
    770   775   780

Lys Trp Ile Lys Asp Asn Ile Ser Pro Lys Leu His Val Asp Lys Gly
785   790   795   800

Phe Val Asn Ile Leu Met Thr Ser Phe Leu Gln Tyr Ile Ser Ser Glu
            805   810   815

Val Asn Pro Pro Ser Asp Glu Thr Asp Ser Ser Ser Ala Pro Ser Lys
        820   825   830

Glu Gln Leu Glu Gln Glu Lys Gln Leu Leu Leu Ser Phe Lys Pro Val
        835   840   845

Met Gln Lys Phe Leu His Asp His Val Asp Leu Gln Val Ser Ala Leu
    850   855   860

Tyr Ala Leu Gln Val His Cys Tyr Asn Ser Asn Phe Pro Lys Gly Met
865   870   875   880

Leu Leu Arg Phe Phe Val His Phe Tyr Asp Met Glu Ile Ile Glu Glu
            885   890   895

652

```
Glu Ala Phe Leu Ala Trp Lys Glu Asp Ile Thr Gln Glu Phe Pro Gly
            900                 905                 910

Lys Gly Lys Ala Leu Phe Gln Val Asn Gln Trp Leu Thr Trp Leu Glu
            915                 920                 925

Thr Ala Glu Glu Glu Glu Ser Glu Glu Glu Ala Asp
            930                 935                 940
```

```
<210> 679
<211> 212
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (172)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 679
Ser Trp Lys Glu Glu Glu Xaa Lys Pro His Leu Gln Gly Lys Pro Gly
 1               5               10                  15

Arg Pro Leu Ser Pro Ala Asn Val Pro Ala Leu Pro Gly Glu Thr Val
            20                  25                  30

Thr Ser Pro Val Arg Leu His Pro Asp Tyr Leu Ser Pro Glu Glu Ile
            35                  40                  45

Gln Arg Gln Leu Gln Asp Ile Glu Arg Arg Leu Asp Ala Leu Glu Leu
        50                  55                  60

Arg Gly Val Glu Leu Glu Lys Arg Leu Arg Ala Ala Glu Gly Asp Asp
 65                  70                  75                  80

Ala Glu Asp Ser Leu Met Val Asp Trp Phe Trp Leu Ile His Glu Lys
                85                  90                  95

Gln Leu Leu Leu Arg Gln Glu Ser Glu Leu Met Tyr Lys Ser Lys Ala
```

```
                    100              105              110

     Gln Arg Leu Glu Glu Gln Gln Leu Asp Ile Glu Gly Glu Leu Arg Arg
             115              120              125

     Leu Met Ala Lys Pro Glu Ala Leu Lys Ser Leu Gln Glu Arg Arg Arg
             130              135              140

     Glu Gln Glu Leu Leu Glu Gln Tyr Val Ser Thr Val Asn Asp Arg Xaa
     145                  150              155              160

     Asp Ile Val Asp Ser Leu Asp Glu Asp Arg Leu Xaa Glu Gln Glu Glu
                     165              170              175

     Asp Gln Met Leu Arg Asp Met Ile Glu Lys Leu Gly Leu Gln Arg Lys
                 180              185              190

     Lys Ser Lys Phe Arg Leu Ser Lys Ile Trp Ser Pro Lys Ser Lys Ser
             195              200              205

     Ser Pro Ser Gln
         210


<210> 680
<211> 412
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (172)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (404)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 680
Val Ala Val Glu Leu Gly Ser Leu Arg Gly Gly Thr Met Ala Ser Glu
 1               5               10              15

Lys Pro Leu Ala Ala Val Thr Cys Thr Ala Pro Val Asn Ile Ala Val
             20              25              30

Ile Lys Tyr Trp Gly Lys Arg Asp Glu Glu Leu Val Leu Pro Ile Asn
         35              40              45

Ser Ser Leu Ser Val Thr Leu His Gln Asp Gln Leu Lys Thr Thr Thr
```

654

```
              50                    55                    60

     Thr Ala Val Ile Ser Lys Asp Phe Thr Glu Asp Arg Ile Trp Leu Asn
     65                    70                    75                    80

     Gly Arg Glu Glu Asp Val Gly Gln Pro Arg Leu Gln Ala Cys Leu Arg
                       85                    90                    95

     Glu Ile Arg Cys Leu Ala Arg Lys Arg Arg Asn Ser Arg Asp Gly Asp
                      100                   105                   110

     Pro Leu Pro Ser Ser Leu Ser Cys Lys Val His Val Ala Ser Val Asn
                      115                   120                   125

     Asn Phe Pro Thr Ala Ala Gly Leu Ala Ser Ser Ala Ala Gly Tyr Ala
                      130                   135                   140

     Cys Leu Ala Tyr Thr Leu Ala Arg Val Tyr Gly Val Glu Ser Asp Leu
     145                   150                   155                   160

     Ser Glu Val Ala Arg Arg Gly Ser Gly Ser Ala Xaa Arg Ser Leu Tyr
                      165                   170                   175

     Gly Gly Phe Val Glu Trp Gln Met Gly Glu Gln Ala Asp Gly Lys Asp
                      180                   185                   190

     Ser Ile Ala Arg Gln Val Ala Pro Glu Ser His Trp Pro Glu Leu Arg
                      195                   200                   205

     Val Leu Ile Leu Val Val Ser Ala Glu Lys Lys Leu Thr Gly Ser Thr
     210                   215                   220

     Val Gly Met Arg Ala Ser Val Glu Thr Ser Pro Leu Leu Arg Phe Arg
     225                   230                   235                   240

     Ala Glu Ser Val Val Pro Ala Arg Met Ala Glu Met Ala Arg Cys Ile
                      245                   250                   255

     Arg Glu Arg Asp Phe Pro Ser Phe Ala Gln Leu Thr Met Lys Asp Ser
                      260                   265                   270

     Asn Gln Phe His Ala Thr Cys Leu Asp Thr Phe Pro Pro Ile Ser Tyr
                      275                   280                   285

     Leu Asn Ala Ile Ser Trp Arg Ile Ile His Leu Val His Arg Phe Asn
                      290                   295                   300

     Ala His His Gly Asp Thr Lys Val Ala Tyr Thr Phe Asp Ala Gly Pro
     305                   310                   315                   320

     Asn Ala Val Ile Phe Thr Leu Asp Asp Thr Val Ala Glu Phe Val Ala
```

```
                   325                 330                 335

   Ala Val Trp His Gly Phe Pro Pro Gly Ser Asn Gly Asp Thr Phe Leu
           340             345             350

   Lys Gly Leu Gln Val Arg Pro Ala Pro Leu Ser Ala Glu Leu Gln Ala
           355             360             365

   Ala Leu Ala Met Glu Pro Thr Pro Gly Gly Val Lys Tyr Ile Ile Val
       370             375             380

   Thr Gln Val Gly Pro Gly Pro Gln Ile Leu Asp Asp Pro Cys Ala His
   385             390             395             400

   Leu Leu Gly Xaa Asp Gly Leu Pro Lys Pro Ala Ala
               405             410
```

<210> 681
<211> 61
<212> PRT
<213> Homo sapiens

<400> 681
```
   Lys Lys Thr Arg His Leu Ser Lys Ile Leu Cys Gly Lys Met Thr Val
    1               5              10              15

   Asn Lys Met Arg Val Ser Gly Pro Phe Val Leu Leu Ser Phe Phe Asp
               20              25              30

   Tyr Lys Phe Leu Leu Thr His Thr Ile Met Ser Ala Asn Pro Leu Leu
           35              40              45

   Pro Arg Glu Arg Asn Cys Ala Pro Ser Val Leu Leu Pro
       50              55              60
```

<210> 682
<211> 243
<212> PRT
<213> Homo sapiens

<400> 682
```
   Ser Ala Pro Pro Pro Pro Arg Arg Lys Thr Ala Pro Pro Ala His Arg
    1               5              10              15

   Gln Arg Pro Pro Pro Gln Ser Pro Thr Ala Thr Gly Leu Gly Pro Ala
               20              25              30
```

656

```
Ala Arg Ser Cys Leu Pro Gln Pro Pro Ser Arg Gly Pro Gln Pro Pro
        35              40              45

Pro Thr Leu Pro His Gly Pro Gly Ala Met Ser Glu Leu Glu Gln Leu
    50              55              60

Arg Gln Glu Ala Glu Gln Leu Arg Asn Gln Ile Arg Asp Ala Arg Lys
65              70              75              80

Ala Cys Gly Asp Ser Thr Leu Thr Gln Ile Thr Ala Gly Leu Asp Pro
            85              90              95

Val Gly Arg Ile Gln Met Arg Thr Arg Arg Thr Leu Arg Gly His Leu
            100             105             110

Ala Lys Ile Tyr Ala Met His Trp Gly Thr Asp Ser Arg Leu Leu Val
        115             120             125

Ser Ala Ser Gln Asp Gly Lys Leu Ile Ile Trp Asp Ser Tyr Thr Thr
    130             135             140

Asn Lys Val His Ala Ile Pro Leu Arg Ser Ser Trp Val Met Thr Cys
145             150             155             160

Ala Tyr Ala Pro Ser Gly Asn Phe Val Ala Cys Gly Gly Leu Asp Asn
            165             170             175

Ile Cys Ser Ile Tyr Ser Leu Lys Thr Arg Glu Ala Thr Ser Gly Ser
            180             185             190

Ala Gly Ser Cys Leu Ala Thr Leu Gly Thr Cys Arg Val Ala Ala Ser
        195             200             205

Trp Met Thr Thr Lys Ser Ser Pro Ala Leu Gly Ile Pro Pro Val Pro
    210             215             220

Cys Gly Thr Leu Arg Gln Ala Ser Arg Gln Trp Val Leu Leu Asp Thr
225             230             235             240

Val Gly Met
```

```
<210> 683
<211> 146
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
```

<222> (133)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 683
Asp Leu Glu Gly Asp Ala Gly Tyr Thr Gly Gly Leu Arg Gln Gly His
 1   5   10   15

Ala Gly Gly Ala Gly Glu Leu Ala Arg Thr Leu Ala Leu Lys Pro Thr
            20   25   30

Ser Leu Glu Leu Phe Arg Thr Lys Val Asn Ala Leu Thr Tyr Gly Glu
          35   40   45

Val Leu Arg Leu Arg Gln Thr Glu Arg Leu His Gln Glu Gly Thr Leu
       50   55   60

Ala Pro Pro Ile Leu Glu Leu Arg Glu Lys Leu Lys Pro Glu Leu Met
65   70   75   80

Gly Leu Ile Arg Gln Gln Arg Leu Leu Arg Leu Cys Glu Gly Thr Leu
               85   90   95

Phe Arg Lys Ile Ser Ser Arg Arg Gln Asp Lys Leu Trp Phe Cys
            100   105   110

Cys Leu Ser Pro Asn His Lys Leu Leu Gln Tyr Gly Asp Met Glu Glu
          115   120   125

Gly Ala Ser Ala Xaa Pro Trp Arg Val Cys Pro Ser Asn Ser Leu Trp
       130   135   140

Pro Thr
145

<210> 684
<211> 300
<212> PRT
<213> Homo sapiens

<400> 684
Val Tyr Ser Cys Gly Phe Gln Val Gln Ser Trp Ser Pro Arg Trp Ile
 1   5   10   15

Trp Val Thr Thr Lys Ser Lys Ile Gly Ala Pro Arg Ser Ser Phe Cys
            20   25   30

Trp His Arg Leu Pro Ser Thr Ser Gln Leu His Leu Cys Pro Ala Glu
          35   40   45

658

```
Gly Glu Ala Pro Ser Ala Gly Glu Ala Ala Pro Arg Ala Pro Thr Gly
    50                  55                  60

Ser Glu Pro Lys Pro Gly Ala Leu Pro Trp Gly Pro Arg Ala Pro Asp
65                  70                  75                  80

Ser Glu Gly Gly Gly Gly Ala Gly Ala Ala Asp Pro Ala Ala Asn Ala
                85                  90                  95

Gly His Gly Ala Ser Ser Glu Ala Glu Cys Gly Cys Gln Arg Thr Leu
            100                 105                 110

Arg Pro Met Pro Ser Thr Pro Gly Pro Gly Ala Ala Ala Val Arg Ala
        ·115                 120                 125

Leu Gly Gln Leu Phe His Ile Ala Cys Phe Thr Cys His Gln Cys Ala
    130                 135                 140

Gln Gln Leu Gln Gly Gln Gln Phe Tyr Ser Leu Glu Gly Ala Pro Tyr
145                 150                 155                 160

Cys Glu Gly Cys Tyr Thr Asp Thr Leu Glu Lys Cys Asn Thr Cys Gly
            165        ·            170                 175

Glu Pro Ile Thr Asp Arg Met Leu Arg Ala Thr Gly Lys Ala Tyr His
        180                 185                 190

Pro His Cys Phe Thr Cys Val Val Cys Ala Arg Pro Leu Glu Gly Thr
        195                 200                 205

Ser Phe Ile Val Asp Gln Ala Asn Arg Pro His Cys Val Pro Asp Tyr
    210                 215                 220

His Lys Gln Tyr Ala Pro Arg Cys Ser Val Cys Ser Glu Pro Ile Met
225                 230                 235                 240

Pro Glu Pro Gly Arg Asp Glu Thr Val Arg Val Val Ala Leu Asp Lys
            245                 250                 255

Asn Phe His Met Lys Cys Tyr Lys Cys Glu Asp Cys Gly Lys Pro Leu
            260                 265                 270

Ser Ile Glu Ala Asp Asp Asn Gly Cys Phe Pro Leu Asp Gly His Val
    275                 280                 285

Leu Cys Arg Lys Cys His Thr Ala Arg Ala Gln Thr
    290                 295                 300
```

<210> 685

659

```
<211> 130
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 685
Ile Arg His Glu Asp Cys Pro Thr Pro Ser Gln Cys Val Val Ala Arg
 1               5              10              15


Thr Leu Gly Lys Gln Gln Thr Val Met Ala Ile Ala Thr Lys Ile Ala
            20              25              30


Leu Gln Met Asn Cys Lys Met Gly Gly Glu Leu Trp Arg Val Asp Ile
        35              40              45


Pro Leu Lys Leu Val Met Ile Val Gly Ile Asp Cys Xaa His Asp Met
    50              55              60


Thr Ala Gly Arg Arg Ser Ile Ala Gly Phe Val Ala Ser Ile Asn Glu
65              70              75              80


Gly Met Thr Arg Trp Phe Ser Arg Cys Ile Phe Gln Asp Arg Gly Gln
            85              90              95


Glu Leu Val Asp Gly Leu Lys Val Cys Leu Gln Ala Ala Leu Arg Ala
            100             105             110


Trp Asn Ser Cys Asn Glu Tyr Met Pro Ser Arg Ile Ile Val Tyr Arg
        115             120             125


Val Ala
    130




<210> 686
<211> 207
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 686
Ile Tyr Gln Val Tyr Asn Ala Leu Gln Glu Lys Val Gln Ala Val Cys
```

```
           1                    5                    10                    15

       Ala Asp Val Glu Lys Ser Glu Arg Val Val Glu Ser Cys Gln Ala Glu
                       20                    25                    30

       Val Asn Lys Leu Arg Arg Gln Ile Thr Gln Arg Lys Asn Glu Lys Glu
                       35                    40                    45

       Gln Glu Arg Arg Leu Gln Gln Ala Val Leu Ser Arg Gln Met Pro Ser
               50                    55                    60

       Glu Ser Leu Asp Pro Ala Phe Ser Pro Arg Met Pro Ser Ser Gly Phe
       65                    70                    75                    80

       Ala Ala Glu Xaa Arg Ser Thr Leu Gly Asp Ala Glu Ala Ser Asp Pro
                       85                    90                    95

       Pro Pro Pro Tyr Ser Asp Phe His Pro Asn Asn Gln Glu Ser Thr Leu
                       100                   105                   110

       Ser His Ser Arg Met Glu Arg Ser Val Phe Met Pro Arg Pro Gln Ala
               115                   120                   125

       Val Gly Ser Ser Asn Tyr Ala Ser Thr Ser Ala Gly Leu Lys Tyr Pro
               130                   135                   140

       Gly Ser Gly Ala Asp Leu Pro Pro Pro Gln Arg Ala Ala Gly Asp Ser
       145                   150                   155                   160

       Gly Glu Asp Ser Asp Asp Ser Asp Tyr Glu Asn Leu Ile Asp Pro Thr
                       165                   170                   175

       Glu Pro Ser Asn Ser Glu Tyr Ser His Ser Lys Asp Ser Arg Pro Met
                       180                   185                   190

       Ala His Pro Asp Glu Asp Pro Arg Asn Thr Gln Thr Ser Gln Ile
               195                   200                   205
```

```
<210> 687
<211> 101
<212> PRT
<213> Homo sapiens

<400> 687
Ala Arg Ala Gly Glu Glu Gly Val Val Thr Arg Trp Arg His Arg Leu
    1                    5                    10                    15

Gly Gln Gly Ala Cys Pro Trp Asp Arg Ser Arg Pro Met Glu Pro Pro
                20                    25                    30
```

661

```
Gly Arg Ser Ser Arg Ser Thr Ala Ser His Thr Leu His Gln Tyr Cys
        35              40              45

Cys Pro Thr Gln Val Leu Asp Ser Met Lys Leu Thr Pro Ser Gly Arg
        50              55              60

Leu Ala Glu Ser Arg Glu Glu Glu Glu Glu Glu Glu Thr Glu Glu Glu
65              70              75                      80

Glu Glu Glu Asp Ala His Gln Phe Cys Cys Pro Ala Ser Glu Cys Ser
            85          90              95

Ser Pro Ser Ser Arg
            100
```

```
<210> 688
<211> 62
<212> PRT
<213> Homo sapiens

<400> 688
Glu Arg Asn Ala Asp Pro Pro Asp Val Ser Leu Gly Lys Ala Val Asn
 1           5               10                  15

Gln Leu Ile Phe Ile Glu Asp Leu Leu Cys Pro Leu His Arg Val Ala
            20              25                  30

Ser Val Arg Glu Ser Trp Phe Phe Pro Arg Asn Thr Asp Phe Leu Ser
        35              40              45

Gly Arg Leu His Val Phe Ile Tyr Phe His His Ser Arg Phe
    50              55              60
```

```
<210> 689
<211> 549
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
```

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 689
Xaa Arg Trp Ala Cys Gly Xaa Leu Leu Leu Leu Val Arg Gly Gln Gly
 1   5   10   15

Gln Asp Ser Ala Ser Pro Ile Arg Thr Thr His Thr Gly Gln Val Leu
                20   25   30

Gly Ser Leu Val His Val Lys Gly Ala Asn Ala Gly Val Gln Thr Phe
        35   40   45

Leu Gly Ile Pro Phe Ala Lys Pro Pro Leu Gly Pro Leu Arg Phe Ala
    50   55   60

Pro Pro Glu Pro Pro Glu Ser Trp Ser Gly Val Arg Asp Gly Thr Thr
65   70   75   80

His Pro Ala Met Cys Leu Gln Asp Leu Thr Ala Val Glu Ser Glu Phe
                85   90   95

Leu Ser Gln Phe Asn Met Thr Phe Pro Ser Asp Ser Met Ser Glu Asp
            100   105   110

Cys Leu Tyr Leu Ser Ile Tyr Thr Pro Ala His Ser His Glu Gly Ser
        115   120   125

Asn Leu Pro Val Met Val Trp Ile His Gly Gly Ala Leu Val Phe Gly
    130   135   140

Met Ala Ser Leu Tyr Asp Gly Ser Met Leu Ala Ala Leu Glu Asn Val
145   150   155   160

Val Val Val Ile Ile Gln Tyr Arg Leu Gly Val Leu Gly Phe Phe Ser
            165   170   175

Thr Gly Asp Lys His Ala Thr Gly Asn Trp Gly Tyr Leu Asp Gln Val
            180   185   190

Ala Ala Leu Arg Trp Val Gln Gln Asn Ile Ala His Phe Gly Gly Asn
        195   200   205

Pro Asp Arg Val Thr Ile Phe Gly Glu Ser Ala Gly Gly Thr Ser Val
    210   215   220

Ser Ser Leu Val Val Ser Pro Ile Ser Gln Gly Leu Phe His Gly Ala
225   230   235   240

Ile Met Glu Ser Gly Val Ala Leu Leu Pro Gly Leu Ile Ala Ser Ser
            245   250   255

663

```
Ala Asp Val Ile Ser Thr Val Val Ala Asn Leu Ser Ala Cys Asp Gln
        260             265             270

Val Asp Ser Glu Ala Leu Val Gly Cys Leu Arg Gly Lys Ser Lys Glu
        275             280             285

Glu Ile Leu Ala Ile Asn Lys Pro Phe Lys Met Ile Pro Gly Val Val
    290             295             300

Asp Gly Val Phe Leu Pro Arg His Pro Gln Glu Leu Leu Ala Ser Ala
305             310             315             320

Asp Phe Gln Pro Val Pro Ser Ile Val Gly Val Asn Asn Asn Glu Phe
            325             330             335

Gly Trp Leu Ile Pro Lys Val Met Arg Ile Tyr Asp Thr Gln Lys Glu
            340             345             350

Met Asp Arg Glu Ala Ser Gln Ala Ala Leu Gln Lys Met Leu Thr Leu
        355             360             365

Leu Met Leu Pro Pro Thr Phe Gly Asp Leu Leu Arg Glu Glu Tyr Ile
    370             375             380

Gly Asp Asn Gly Asp Pro Gln Thr Leu Gln Ala Gln Phe Gln Glu Met
385             390             395             400

Met Ala Asp Ser Met Phe Val Ile Pro Ala Leu Gln Val Ala His Phe
            405             410             415

Gln Cys Ser Arg Ala Pro Val Tyr Phe Tyr Glu Phe Gln His Gln Pro
        420             425             430

Ser Trp Leu Lys Asn Ile Arg Pro Pro His Met Lys Ala Asp His Gly
        435             440             445

Asp Glu Leu Pro Phe Val Phe Arg Ser Phe Phe Gly Gly Asn Tyr Ile
    450             455             460

Lys Phe Thr Glu Glu Glu Glu Gln Leu Ser Arg Lys Met Met Lys Tyr
465             470             475             480

Trp Ala Asn Phe Ala Arg Asn Gly Asn Pro Asn Gly Glu Gly Leu Pro
            485             490             495

His Trp Pro Leu Phe Asp Gln Glu Glu Gln Tyr Leu Gln Leu Asn Leu
        500             505             510

Gln Pro Ala Val Gly Arg Ala Leu Lys Ala His Arg Leu Gln Phe Trp
        515             520             525
```

664

```
Lys Lys Ala Leu Pro Gln Lys Ile Gln Glu Leu Glu Glu Pro Glu Glu
    530                 535                 540

Arg His Thr Glu Leu
545



<210> 690
<211> 155
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 690
Ser His Arg Val Thr His Cys Pro Tyr Ala Val Ala Leu Pro Glu Val
    1               5                   10                  15

Ala Pro Ala Gln Pro Leu Thr Glu Ala Leu Arg Ala Leu Cys His Val
            20                  25                  30

Gly Leu Phe Xaa Phe Ala Phe Cys Ala Leu Phe Asp Cys Xaa Arg Pro
        35                  40                  45

Val Xaa Gln Lys Ser Cys Asp Leu Leu Leu Phe Leu Arg Asp Lys Ile
    50                  55                  60

Ala Ser Tyr Ser Ser Leu Arg Glu Ala Arg Gly Ser Pro Asn Thr Ala
65                  70                  75                  80

Ser Ala Glu Ala Xaa Leu Pro Arg Trp Arg Ala Gly Glu Gln Ala Gln
                85                  90                  95
```

```
Pro Pro Gly Asp Gln Glu Pro Glu Ala Val Leu Ala Met Leu Arg Ser
            100             105             110

Leu Asp Leu Glu Gly Leu Arg Ser Thr Leu Ala Glu Ser Ser Asp His
            115             120             125

Val Glu Lys Ser Pro Gln Ser Leu Leu Gln Asp Met Leu Ala Thr Gly
    130             135             140

Gly Phe Leu Gln Gly Asp Glu Ala Asp Cys Tyr
145             150             155
```

<210> 691
<211> 149
<212> PRT
<213> Homo sapiens

<400> 691

```
Met Cys Leu Glu Arg Pro Leu Arg Glu Gly Pro Arg Val Met Glu Lys
  1               5              10              15

Glu Ala Trp Pro Gly Ser Leu Glu Gly Arg Gly Gly Gly Trp Arg His
            20              25              30

Leu Asp Cys Pro Leu Leu Ser His Thr Trp Gly Val Val Thr Pro Phe
            35              40              45

Thr Pro Ala Arg Leu Pro Ser Ala Phe His Glu Leu His Leu Leu Pro
    50              55              60

Thr Ser Leu Trp Arg Gly Trp Gly Pro Leu Ala Ser Thr Arg Gly Pro
65              70              75              80

Ser Ala Ser Pro Lys Pro Glu Pro Ser Ala Pro Gly Glu Asn Lys Trp
            85              90              95

Leu Ser Phe Asp Thr Trp Gly Arg Arg Glu Ala Ala Gly Trp Arg Gln
            100             105             110

Ser Gln Gly Arg Asp Thr Thr Glu Gly Asp Pro Asp Ile Pro Arg Lys
            115             120             125

Phe Pro Ala Glu Gln Thr Ala Phe Gln Pro Glu Ala Cys Leu Asn Cys
    130             135             140

Val Met Cys Asn Asn
145
```

```
<210> 692
<211> 218
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (160)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 692
Pro Gly Val Lys Leu Trp Asp Val Pro Val Met Leu Asp His Lys Asp
 1               5                  10                  15

Leu Glu Ala Glu Ile His Pro Leu Lys Asn Glu Glu Arg Lys Ser Gln
                20                  25                  30

Glu Asn Leu Gly Asn Pro Ser Lys Asn Glu Asp Asn Val Lys Ser Ala
            35                  40                  45

Pro Pro Gln Ser Arg Leu Ser Arg Cys Arg Ala Ala Ala Phe Phe Leu
    50                  55                  60

Ser Leu Phe Leu Cys Leu Phe Val Val Phe Val Val Ser Phe Val Ile
65                  70                  75                  80

Pro Cys Pro Asp Arg Pro Ala Ser Gln Arg Met Trp Arg Ile Asp Tyr
                85                  90                  95

Ser Ala Ala Val Ile Tyr Asp Phe Leu Ala Val Asp Asp Ile Asn Gly
            100                 105                 110

Asp Arg Ile Gln Asp Val Leu Phe Leu Tyr Lys Asn Thr Asn Ser Ser
        115                 120                 125

Asn Asn Phe Ser Arg Ser Cys Val Asp Glu Gly Phe Ser Ser Pro Cys
    130                 135                 140

Thr Phe Ala Ala Ala Val Ser Gly Ala Asn Ala Ala Arg Ser Gly Xaa
145                 150                 155                 160

Asp Leu Trp Pro Lys Thr Trp Pro Ser Trp Ser Val Leu Cys Pro Ser
                165                 170                 175

Gln Glu Ala Val Arg His Leu Leu Pro Ala Ser Trp Trp Ala Asp Pro
                180                 185                 190

Val Leu Ser Leu Gln Ser Thr Cys Ser Gln Gly Lys Pro Trp Lys Pro
            195                 200                 205
```

```
Gln Pro Ala Val Gln Gly Glu Trp Ser Ile
    210                 215
```

```
<210> 693
<211> 68
<212> PRT
<213> Homo sapiens

<400> 693
Ser Cys Asn Ser Ser Asn Asn Ile Leu Gln Leu Pro Tyr Arg Asn Arg
 1               5                   10                  15

Ser Gly Arg Ala Lys Ser Asp Leu Gly Lys Val Ile Arg Tyr Arg Leu
            20                  25                  30

Ser Ile Pro Phe Pro Lys Met Leu Gly Thr Arg Ser Ile Ser Asp Phe
        35                  40                  45

Ile Ile Phe Phe Lys Val Trp Asn Ile Cys Ile Ile Leu Thr Ser Trp
    50                  55                  60

Ala Ser Gln Ile
 65
```

```
<210> 694
<211> 234
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (219)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 694
Cys Ala Xaa Xaa Leu Arg Gly Phe Asp Gln Gln Met Ser Ser Met Val
```

668

```
  1              5                10               15

Ile Glu His Met Ala Ser His Gly Thr Arg Phe Leu Arg Gly Cys Ala
            20              25              30

Pro Ser Arg Val Arg Arg Leu Pro Asp Gly Gln Leu Gln Val Thr Trp
        35              40              45

Glu Asp Ser Thr Thr Gly Lys Glu Asp Thr Gly Thr Phe Asp Thr Val
    50              55              60

Leu Trp Ala Ile Gly Arg Val Pro Asp Thr Arg Ser Leu Asn Leu Glu
65              70              75              80

Lys Ala Gly Val Asp Thr Ser Pro Asp Thr Gln Lys Ile Leu Val Asp
            85              90              95

Ser Arg Glu Ala Thr Ser Val Pro His Ile Tyr Ala Ile Gly Asp Val
            100             105             110

Val Glu Gly Arg Pro Glu Leu Thr Pro Thr Ala Ile Met Ala Gly Arg
    115             120             125

Leu Leu Val Gln Arg Leu Phe Gly Gly Ser Ser Asp Leu Met Asp Tyr
    130             135             140

Asp Asn Val Pro Thr Thr Val Phe Thr Pro Leu Glu Tyr Gly Cys Val
145             150             155             160

Gly Leu Ser Glu Glu Glu Ala Val Ala Arg His Gly Gln Glu His Val
            165             170             175

Glu Val Tyr His Ala His Tyr Lys Pro Leu Glu Phe Thr Val Ala Gly
            180             185             190

Arg Asp Ala Ser Gln Cys Tyr Val Lys Met Val Cys Leu Arg Glu Pro
    195             200             205

Pro Gln Leu Val Leu Gly Leu His Phe Leu Xaa Pro Thr Gln Ala Asn
    210             215             220

Tyr Ser Arg Ile Cys Ser Gly Asp Lys Cys
225             230
```

<210> 695
<211> 460
<212> PRT
<213> Homo sapiens

669

<400> 695

| Pro
1 | Cys | Pro | Pro | Arg
5 | Pro | Gln | Glu | Leu | Pro
10 | Gly | Arg | Ser | Pro | Ser
15 | Ser |

Pro Cys Pro Pro Arg Pro Gln Glu Leu Pro Gly Arg Ser Pro Ser Ser
 1   5   10   15

Trp Ser Ala Leu Gly Trp Pro Ala Ala Leu Gly Gly Gly Val Val Ala
            20   25   30

Val Ala Val Cys Glu Pro Val Ala Arg Leu Leu Trp Ala Gly Thr Leu
            35   40   45

Lys Ile Ala Ala Met Ala Glu Asn Gly Asp Asn Glu Lys Met Ala Ala
        50   55   60

Leu Glu Ala Lys Ile Cys His Gln Ile Glu Tyr Tyr Phe Gly Asp Phe
 65   70   75   80

Asn Leu Pro Arg Asp Lys Phe Leu Lys Glu Gln Ile Lys Leu Asp Glu
                85   90   95

Gly Trp Val Pro Leu Glu Ile Met Ile Lys Phe Asn Arg Leu Asn Arg
            100   105   110

Leu Thr Thr Asp Phe Asn Val Ile Val Glu Ala Leu Ser Lys Ser Lys
        115   120   125

Ala Glu Leu Met Glu Ile Ser Glu Asp Lys Thr Lys Ile Arg Arg Ser
    130   135   140

Pro Ser Lys Pro Leu Pro Glu Val Thr Asp Glu Tyr Lys Asn Asp Val
145   150   155   160

Lys Asn Arg Ser Val Tyr Ile Lys Gly Phe Pro Thr Asp Ala Thr Leu
            165   170   175

Asp Asp Ile Lys Glu Trp Leu Glu Asp Lys Gly Gln Val Leu Asn Ile
        180   185   190

Gln Met Arg Arg Thr Leu His Lys Ala Phe Lys Gly Ser Ile Phe Val
    195   200   205

Val Phe Asp Ser Ile Glu Ser Ala Lys Lys Phe Val Glu Thr Pro Gly
    210   215   220

Gln Lys Tyr Lys Glu Thr Asp Leu Leu Ile Leu Phe Lys Asp Asp Tyr
225   230   235   240

Phe Ala Lys Lys Asn Glu Glu Arg Lys Gln Asn Lys Val Glu Ala Lys
            245   250   255

Leu Arg Ala Lys Gln Glu Gln Glu Ala Lys Gln Lys Leu Glu Glu Asp
            260   265   270

```
Ala Glu Met Lys Ser Leu Glu Glu Lys Ile Gly Cys Leu Leu Lys Phe
        275             280             285

Ser Gly Asp Leu Asp Asp Gln Thr Cys Arg Glu Asp Leu His Ile Leu
    290             295             300

Phe Ser Asn His Gly Glu Ile Lys Trp Ile Asp Phe Val Arg Gly Ala
305             310             315             320

Lys Glu Gly Ile Ile Leu Phe Lys Glu Lys Ala Lys Glu Ala Leu Gly
            325             330             335

Lys Ala Lys Asp Ala Asn Asn Gly Asn Leu Gln Leu Arg Asn Lys Glu
        340             345             350

Val Thr Trp Glu Val Leu Glu Gly Glu Val Glu Lys Glu Ala Leu Lys
    355             360             365

Lys Ile Ile Glu Asp Gln Gln Glu Ser Leu Asn Lys Trp Lys Ser Lys
    370             375             380

Gly Arg Arg Phe Lys Gly Lys Gly Lys Gly Asn Lys Ala Ala Gln Pro
385             390             395             400

Gly Ser Gly Lys Gly Lys Val Gln Phe Gln Gly Lys Lys Thr Lys Phe
            405             410             415

Ala Ser Asp Asp Glu His Asp Glu His Asp Glu Asn Gly Ala Thr Gly
        420             425             430

Pro Val Lys Arg Ala Arg Glu Glu Thr Asp Lys Glu Glu Pro Ala Ser
    435             440             445

Lys Gln Gln Lys Thr Glu Asn Gly Ala Gly Asp Gln
    450             455             460
```

```
<210> 696
<211> 80
<212> PRT
<213> Homo sapiens

<400> 696
Gly Glu Glu Gly Val Gly Ser Pro Ser Gly Ile Leu Ala Thr Pro Leu
  1             5               10              15

Arg Ser Ala Arg Gly Thr Thr His Thr His Thr His Thr His Thr His
          20              25              30
```

671

```
Thr His Ser His Thr His Ala His Phe Pro Ser Phe Pro Asp Pro Leu
        35                  40                  45

Phe Gln Ser Ser Pro Phe Ser Ser Gly Phe Ile Asp Glu Tyr Lys Tyr
        50                  55                  60

Pro His Leu Trp Pro Val Met Ser Val Thr Cys Cys Arg Phe Cys Val
65                  70                  75                  80
```

```
<210> 697
<211> 257
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 697
Trp Pro Arg Arg Pro Gly Pro His Leu Gly Val Leu Glu Phe Pro Gly
 1               5                  10                  15

Ala Gly Cys Gly Ala Ser Ala Ala Gly Trp Pro Ser Ala Xaa Met Leu
            20                  25                  30

Pro Gly Arg Gly Pro Arg Pro Phe Arg Ala Arg Leu Val Gly Arg Glu
        35                  40                  45

Leu Val Ser Met Leu Ala Arg Glu Leu Pro Ala Ala Val Ala Pro Ala
        50                  55                  60

Gly Pro Ala Ser Leu Ala Arg Trp Thr Leu Gly Phe Cys Asp Glu Arg
65                  70                  75                  80

Leu Val Pro Phe Asp His Ala Glu Ser Thr Tyr Gly Leu Tyr Arg Thr
                85                  90                  95

His Leu Leu Ser Arg Leu Pro Ile Pro Glu Ser Gln Val Ile Thr Ile
            100                 105                 110

Asn Pro Glu Leu Pro Val Glu Glu Ala Ala Glu Asp Tyr Ala Lys Lys
            115                 120                 125

Leu Arg Gln Ala Phe Gln Gly Asp Ser Ile Pro Val Phe Asp Leu Leu
            130                 135                 140
```

Ile Leu Gly Val Gly Pro Asp Gly His Thr Cys Ser Leu Phe Pro Asp
145   150   155   160

His Pro Leu Leu Gln Glu Arg Glu Lys Ile Val Ala Pro Ile Ser Asp
                165   170   175

Ser Pro Lys Pro Pro Pro Gln Arg Val Thr Leu Thr Leu Pro Val Leu
            180   185   190

Asn Ala Ala Arg Thr Val Ile Phe Val Ala Thr Gly Glu Gly Lys Ala
            195   200   205

Ala Val Leu Lys Arg Ile Leu Glu Asp Gln Glu Glu Asn Pro Leu Pro
    210   215   220

Ala Ala Leu Val Gln Pro His Thr Gly Lys Leu Cys Trp Phe Leu Asp
225   230   235   240

Glu Ala Ala Ala Arg Leu Leu Thr Val Pro Phe Glu Lys His Ser Thr
            245   250   255

Leu

<210> 698
<211> 68
<212> PRT
<213> Homo sapiens

<400> 698
Gln Tyr Lys Thr Pro Ala Val Asp Thr Thr Met Met Thr Phe His Glu
1   5   10   15

Leu Val Phe Leu Val Leu Thr Ala Lys Phe Val Leu Phe Thr Gly Gln
            20   25   30

Ile Ser Asn Lys Val Leu Gly Leu Lys Ile His Gly Trp Thr Glu Val
        35   40   45

Pro Tyr Pro Leu Thr Met Glu Ala Gly Ala Thr Phe Trp Gly Tyr Leu
    50   55   60

Phe Leu Asn Phe
65

<210> 699

673

<211> 360
<212> PRT
<213> Homo sapiens

<400> 699
Pro Cys Ser Ala Thr Thr Ala Trp Val Lys Ser Ser Ile Lys Thr His
1   5   10   15

Leu Cys Ala Ser Leu Arg His Ile Arg Phe Leu Leu Ser Val Cys Leu
            20   25   30

Leu Cys Leu Val Ala Gly Thr Ala Val Ala Val Lys Met Ala Ser Thr
            35   40   45

Ser Arg Leu Asp Ala Leu Pro Arg Val Thr Cys Pro Asn His Pro Asp
        50   55   60

Ala Ile Leu Val Glu Asp Tyr Arg Ala Gly Asp Met Ile Cys Pro Glu
65   70   75   80

Cys Gly Leu Val Val Gly Asp Arg Val Ile Asp Val Gly Ser Glu Trp
                85   90   95

Arg Thr Phe Ser Asn Asp Lys Ala Thr Lys Asp Pro Ser Arg Val Gly
            100   105   110

Asp Ser Gln Asn Pro Leu Leu Ser Asp Gly Asp Leu Ser Thr Met Ile
            115   120   125

Gly Lys Gly Thr Gly Ala Ala Ser Phe Asp Glu Phe Gly Asn Ser Lys
        130   135   140

Tyr Gln Asn Arg Arg Thr Met Ser Ser Ser Asp Arg Ala Met Met Asn
145   150   155   160

Ala Phe Lys Glu Ile Thr Thr Met Ala Asp Arg Ile Asn Leu Pro Arg
                165   170   175

Asn Ile Val Asp Arg Thr Asn Asn Leu Phe Lys Gln Val Tyr Glu Gln
            180   185   190

Lys Ser Leu Lys Gly Arg Ala Asn Asp Ala Ile Ala Ser Ala Cys Leu
        195   200   205

Tyr Ile Ala Cys Arg Gln Glu Gly Val Pro Arg Thr Phe Lys Glu Ile
        210   215   220

Cys Ala Val Ser Arg Ile Ser Lys Lys Glu Ile Gly Arg Cys Phe Lys
225   230   235   240

Leu Ile Leu Lys Ala Leu Glu Thr Ser Val Asp Leu Ile Thr Thr Gly

674

```
                       245                250                255

    Asp Phe Met Ser Arg Phe Cys Ser Asn Leu Cys Leu Pro Lys Gln Val
                260                265                270

    Gln Met Ala Ala Thr His Ile Ala Arg Lys Ala Val Glu Leu Asp Leu
                275                280                285

    Val Pro Gly Arg Ser Pro Ile Ser Val Ala Ala Ala Ala Ile Tyr Met
                290                295                300

    Ala Ser Gln Ala Ser Ala Glu Lys Arg Thr Gln Lys Glu Ile Gly Asp
    305                310                315                320

    Ile Ala Gly Val Ala Asp Val Thr Ile Arg Gln Ser Tyr Arg Leu Ile
                325                330                335

    Tyr Pro Arg Ala Pro Asp Leu Phe Pro Thr Asp Phe Lys Phe Asp Thr
                340                345                350

    Pro Val Asp Lys Leu Pro Gln Leu
                355                360
```

<210> 700
<211> 364
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (353)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (360)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 700

675

```
Pro Ser Trp Leu Arg Ala Arg Ser Ser Arg Ser Trp Xaa Ala Ser Pro
 1               5                10            15

Arg Gly Pro Gln Pro Pro Arg Ile Arg Ala Arg Ser Ala Xaa Pro Met
            20            25            30

Glu Gly Ala Arg Val Phe Gly Ala Leu Gly Pro Ile Gly Pro Ser Ser
        35            40            45

Pro Gly Leu Thr Leu Gly Gly Leu Ala Val Ser Glu His Arg Leu Ser
    50            55            60

Asn Lys Leu Leu Ala Trp Ser Gly Val Leu Glu Trp Gln Glu Lys Arg
65            70            75            80

Arg Pro Tyr Ser Asp Ser Thr Ala Lys Leu Lys Arg Thr Leu Pro Cys
            85            90            95

Gln Ala Tyr Val Asn Gln Gly Glu Asn Leu Glu Thr Asp Gln Trp Pro
        100           105           110

Gln Lys Leu Ile Met Gln Leu Ile Pro Gln Gln Leu Leu Thr Thr Leu
    115           120           125

Gly Pro Leu Phe Arg Asn Ser Gln Leu Ala Gln Phe His Phe Thr Asn
    130           135           140

Arg Asp Cys Asp Ser Leu Lys Gly Leu Cys Arg Ile Met Gly Asn Gly
145           150           155           160

Phe Ala Gly Cys Met Leu Phe Pro His Ile Ser Pro Cys Glu Val Arg
            165           170           175

Val Leu Met Leu Leu Tyr Ser Ser Lys Lys Lys Ile Phe Met Gly Leu
            180           185           190

Ile Pro Tyr Asp Gln Ser Gly Phe Val Ser Ala Ile Arg Gln Val Ile
            195           200           205

Thr Thr Arg Lys Gln Ala Val Gly Pro Gly Gly Val Asn Ser Gly Pro
    210           215           220

Val Gln Ile Val Asn Asn Lys Phe Leu Ala Trp Ser Gly Val Met Glu
225           230           235           240

Trp Gln Glu Pro Arg Pro Glu Pro Asn Ser Arg Ser Lys Arg Trp Leu
            245           250           255

Pro Ser His Val Tyr Val Asn Gln Gly Glu Ile Leu Arg Thr Glu Gln
            260           265           270
```

```
Trp Pro Arg Lys Leu Tyr Met Gln Leu Ile Pro Gln Gln Leu Leu Thr
    275                 280             285

Thr Leu Val Pro Leu Phe Arg Asn Ser Arg Leu Val Gln Phe His Phe
    290             295                 300

Thr Lys Asp Leu Glu Thr Leu Lys Ser Leu Cys Arg Ile Met Asp Asn
305             310                 315                 320

Gly Phe Ala Gly Cys Val His Phe Ser Tyr Lys Ala Ser Cys Glu Ile
            325                 330                 335

Arg Val Leu Met Leu Leu Tyr Ser Ser Glu Lys Lys Ile Phe Ile Gly
        340                 345                 350

Xaa Ile Pro His Asp Gln Gly Xaa Phe Val Gln Arg
    355                 360
```

.

```
<210> 701
<211> 156
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 701
Gly Thr Arg Gly Ile Leu His Val Ala Val Pro Ala Arg Gly Thr His
  1             5               10                  15

Ala Gln Cys Cys Arg Asn Trp Thr Val Pro Asp Ser Gly Gln Gly Lys
            20              25                  30

Xaa Val Met Leu Glu Gly Gln Gly Arg Leu Glu Arg Val His Ile Pro
        35              40                  45

Leu Ser Ala Pro Ala Ser Ala Thr Val Gln Arg Pro Thr Gly Pro Gln
    50              55          .       60

Pro Val Ala Cys Pro His Cys Pro Val Pro Thr Ser Asn Ser Pro Gln
65              70              75                  80

Pro Leu Val Ala Ser Val Pro Cys Pro Leu Gly Phe Ser Ser Gln Pro
                85          90                  95

Ser Gly Leu Gly Leu Cys Arg Lys Val Met Pro Thr Gly Thr Leu Leu
            100             105             110
```

```
Thr Pro Gly Ser Phe Met Asp Val Val Ser Glu Leu Arg Thr Arg Gly
        115                 120                 125

Cys Gln Met Phe Leu Ala Pro His Val Ser Phe Arg Thr Glu Gln Lys
        130                 135                 140

His Lys Asp Ser Ala Lys Ser Ser Leu Tyr Ser Leu
145                 150                 155


<210> 702
<211> 150
<212> PRT
<213> Homo sapiens

<400> 702
Ala Gly His Gly Leu Gly Val Arg Ala Gly Leu Lys Glu Phe Ala Thr
  1             5                 10                  15

Asn Leu Thr Glu Ser Gly Val His Gly Ala Leu Leu Ala Leu Asp Glu
            20                  25                  30

Thr Phe Asp Tyr Ser Asp Leu Ala Leu Leu Leu Gln Ile Pro Thr Gln
        35                  40                  45

Asn Ala Gln Ala Arg Gln Leu Leu Glu Lys Glu Phe Ser Asn Leu Ile
    50                  55                  60

Ser Leu Gly Thr Asp Arg Arg Leu Asp Glu Asp Ser Ala Lys Ser Phe
65                  70                  75                  80

Ser Arg Ser Pro Ser Trp Arg Lys Met Phe Arg Glu Lys Asp Leu Arg
                85                  90                  95

Gly Val Thr Pro Asp Ser Ala Glu Met Leu Pro Pro Asn Phe Arg Ser
            100                 105                 110

Ala Ala Ala Gly Ala Leu Gly Ser Pro Gly Leu Pro Leu Arg Lys Leu
        115                 120                 125

Gln Pro Glu Gly Gln Thr Ser Gly Ser Ser Arg Ala Asp Gly Val Ser
        130                 135                 140

Val Arg Thr Tyr Ser Cys
145                 150


<210> 703
```

```
<211> 527
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (243)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (257)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (259)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (471)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (477)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (480)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (484)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (511)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (519)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 703
Cys Val Cys Val Glu Gly Val Glu Gly Pro Arg Cys Asp Lys Cys Thr
```

679

```
    1               5               10              15

Arg Gly Tyr Ser Gly Val Phe Pro Asp Cys Thr Pro Cys His Gln Cys
            20              25              30

Phe Ala Leu Trp Asp Val Ile Ile Ala Glu Leu Thr Asn Arg Thr His
        35              40              45

Arg Phe Leu Glu Lys Ala Lys Ala Leu Lys Ile Ser Gly Val Ile Gly
    50              55              60

Pro Tyr Arg Glu Thr Val Asp Ser Val Glu Arg Lys Val Ser Glu Ile
65              70              75              80

Lys Asp Ile Leu Ala Gln Ser Pro Ala Ala Glu Pro Leu Lys Asn Ile
            85              90              95

Gly Asn Leu Phe Glu Glu Ala Glu Lys Leu Ile Lys Asp Val Thr Glu
        100             105             110

Met Met Ala Gln Val Glu Val Lys Leu Ser Asp Thr Thr Ser Gln Ser
    115             120             125

Asn Ser Thr Ala Lys Glu Leu Asp Ser Leu Gln Thr Glu Ala Glu Ser
130             135             140

Leu Asp Asn Thr Val Lys Glu Leu Ala Glu Gln Leu Glu Phe Ile Lys
145             150             155             160

Asn Ser Asp Ile Arg Gly Ala Leu Asp Ser Ile Thr Lys Tyr Phe Gln
            165             170             175

Met Ser Leu Glu Ala Glu Glu Arg Val Asn Ala Ser Thr Thr Glu Pro
        180             185             190

Asn Ser Thr Val Glu Gln Ser Ala Leu Met Arg Asp Arg Val Glu Asp
        195             200             205

Val Met Met Glu Arg Glu Ser Gln Phe Lys Glu Lys Gln Glu Glu Gln
    210             215             220

Ala Arg Leu Leu Asp Glu Leu Ala Gly Lys Leu Gln Ser Leu Asp Leu
225             230             235             240

Ser Ala Xaa Ala Glu Met Thr Cys Gly Thr Pro Pro Gly Ala Ser Cys
            245             250             255

Xaa Glu Xaa Glu Cys Gly Gly Pro Asn Cys Arg Thr Asp Glu Gly Glu
        260             265             270

Arg Lys Cys Gly Gly Pro Gly Cys Gly Gly Leu Val Thr Val Ala His
```

680

```
           275                    280                    285

   Asn Ala Trp Gln Lys Ala Met Asp Leu Asp Gln Asp Val Leu Ser Ala
      290                    295                    300

   Leu Ala Glu Val Glu Gln Leu Ser Lys Met Val Ser Glu Ala Lys Leu
   305                    310                    315                    320

   Arg Ala Asp Glu Ala Lys Gln Ser Ala Glu Asp Ile Leu Leu Lys Thr
                  325                    330                    335

   Asn Ala Thr Lys Glu Lys Met Asp Lys Ser Asn Glu Glu Leu Arg Asn
                  340                    345                    350

   Leu Ile Lys Gln Ile Arg Asn Phe Leu Thr Gln Asp Ser Ala Asp Leu
          355                    360                    365

   Asp Ser Ile Glu Ala Val Ala Asn Glu Val Leu Lys Met Glu Met Pro
          370                    375                    380

   Ser Thr Pro Gln Gln Leu Gln Asn Leu Thr Glu Asp Ile Arg Glu Arg
   385                    390                    395                    400

   Val Glu Ser Leu Ser Gln Val Glu Val Ile Leu Gln His Ser Ala Ala
                  405                    410                    415

   Asp Ile Ala Arg Ala Glu Met Leu Leu Glu Glu Ala Lys Arg Ala Ser
                  420                    425                    430

   Lys Ser Ala Thr Asp Val Lys Val Thr Ala Asp Met Val Lys Glu Ala
          435                    440                    445

   Leu Glu Glu Ala Glu Lys Ala Gln Val Ala Ala Glu Lys Ala Ile Lys
          450                    455                    460

   Gln Ala Asp Glu Asp Ile Xaa Arg Asn Pro Glu Pro Xaa Asn Phe Xaa
   465                    470                    475                    480

   Leu Glu Phe Xaa Lys Gln Gln Leu Ser Gly Gly Asn Leu Val Gln Arg
                  485                    490                    495

   Val Pro Arg Ala Ser Ser Glu Phe Arg Glu Asp Val Gly Arg Xaa Leu
                  500                    505                    510

   Ser Gly Lys Leu Ala Gln Xaa Pro Gly Gly Gly Arg Ile Phe Trp
          515                    520                    525
```

<210> 704
<211> 62

681

<212> PRT
<213> Homo sapiens

<400> 704
Val Tyr Gln Arg Lys Ser Thr Val Val Leu Gly Gly Phe Leu Leu Trp
1   5   10   15

Asp Ile Asp Phe Leu Phe Phe Phe Arg Asn Ile Val Cys Cys Asn Leu
            20   25   30

Asn Lys Asn Tyr Asp Ile Leu Arg Tyr Phe Ile Asp Lys Pro Asn Lys
        35   40   45

Asn Ile Cys Phe Tyr Phe Lys Val Asn Val Phe Leu Phe Ser
        50   55   60

<210> 705
<211> 44
<212> PRT
<213> Homo sapiens

<400> 705
Thr Glu Asp Leu Phe Gly Phe Lys His Leu Leu Arg Gln Tyr Leu Leu
1   5   10   15

Gly Lys Pro Asn Ile Ala Asn Gly Gln Phe Asp Phe Asn Phe Ser Lys
            20   25   30

Asp Thr Leu Leu Ser Arg Arg Leu Lys Cys Leu His
        35   40

<210> 706
<211> 193
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 706
Xaa Gly Arg Ala Trp Val Met Ala Ala Pro Gly Ala Leu Leu Val Met
1   5   10   15

Gly Val Ser Gly Ser Gly Lys Ser Thr Val Gly Ala Leu Leu Ala Ser
            20   25   30

```
Glu Leu Gly Trp Lys Phe Tyr Asp Ala Asp Asp Tyr His Pro Glu Glu
        35          40              45

Asn Arg Arg Lys Met Gly Lys Gly Ile Pro Leu Asn Asp Gln Asp Arg
        50          55              60

Ile Pro Trp Leu Cys Asn Leu His Asp Ile Leu Leu Arg Asp Val Ala
65          70              75              80

Ser Gly Gln Arg Val Val Leu Ala Cys Ser Ala Leu Lys Lys Thr Tyr
            85          90              95

Arg Asp Ile Leu Thr Gln Gly Lys Asp Gly Val Ala Leu Lys Cys Glu
        100         105             110

Glu Ser Gly Lys Glu Ala Lys Gln Ala Glu Met Gln Leu Leu Val Val
        115         120             125

His Leu Ser Gly Ser Phe Glu Val Ile Ser Gly Arg Leu Leu Lys Arg
    130         135             140

Glu Gly His Phe Met Pro Pro Glu Leu Leu Gln Ser Gln Phe Glu Thr
145         150             155             160

Leu Glu Pro Pro Ala Ala Pro Glu Asn Phe Ile Gln Ile Ser Val Asp
        165         170             175

Lys Asn Val Ser Glu Ile Ile Ala Thr Ile Met Glu Thr Leu Lys Met
        180         185             190

Lys
```

<210> 707
<211> 121
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

683

<400> 707
Gly Ile Arg Gly Gln Thr Leu Trp Leu Gly Pro Leu Gly Ala Thr Leu
 1   5   10   15

Trp Pro Leu Gly Ala Leu Glu Thr Ser His Val Leu Trp Ala Leu Trp
            20   25   30

Arg Ala Leu Ala Leu His Gly Gly Ala Gly Arg His Cys Leu Pro Cys
        35   40   45

Pro Leu Pro Ala Ala Pro Ala Leu Val Cys Arg Leu Gly Pro Gly Cys
    50   55   60

Leu Leu Leu Gly Val Trp Pro Arg Ala Pro Val Lys Pro Trp Arg His
65   70   75   80

Cys Val Cys Val Met Gly Ser Glu Gly Leu Val Gly Ala Val His Trp
            85   90   95

Ser Ser Ser Leu Pro Xaa Xaa Ala Ile Ser Met Ala Pro Phe Ala Ala
            100   105   110

Glu Asp Thr His Cys Gly Ser Val Gly
        115   120

<210> 708
<211> 112
<212> PRT
<213> Homo sapiens

<400> 708
Asn Ser Phe Cys Tyr Phe His Ile Arg Val Gln Thr Tyr Lys Gly Ala
 1   5   10   15

Cys Ser Leu Lys Val His Asn Tyr Ser Tyr Ser Val Cys Leu Tyr Cys
            20   25   30

Tyr Arg Met Leu Cys Phe Gly Ala Leu Ser Ser Ala Asp Pro Arg Ser
        35   40   45

Ser Val Glu Ile His Cys Leu Gly His Ser Leu Ile Arg Met Leu Ala
        50   55   60

Gly Asp Phe Val Ser Asp Val Ala Ser Leu Phe Ser Val His Arg Leu
65   70   75   80

Arg Val Thr Thr Val Ala Cys Arg Val His Pro Val Gly Ala Ala Gln
            85   90   95

```
Leu Ser Glu Ser Lys Asn Leu Pro Thr Tyr Ser Asn Val Phe Ala Leu
            100                 105                 110
```

<210> 709
<211> 72
<212> PRT
<213> Homo sapiens

<400> 709
```
Arg Arg Val Trp Val Leu Phe Pro Pro Gln Arg Pro Glu Ser Gly Trp
  1               5                  10                  15

Gly Val Ser Pro Val Glu Gly Glu Thr Val Pro Ala Leu Arg Gly Met
            20                  25                  30

Lys Lys Ser Val Gly Leu Pro Val Ala Val Gln Cys Val Ala Leu Pro
          35                  40                  45

Trp Gln Glu Glu Leu Cys Leu Arg Phe Met Arg Glu Val Glu Arg Leu
        50                  55                  60

Met Thr Pro Glu Lys Gln Ser Ser
 65                  70
```

<210> 710
<211> 84
<212> PRT
<213> Homo sapiens

<400> 710
```
Arg Leu His Arg Tyr Pro Glu Ala Met Ala Ser Lys Gly Leu Gln Asp
  1               5                  10                  15

Leu Lys Gln Gln Val Glu Gly Thr Ala Gln Glu Ala Val Ser Ala Ala
            20                  25                  30

Gly Ala Ala Ala Gln Gln Val Val Asp Gln Ala Thr Glu Ala Gly Gln
          35                  40                  45

Lys Ala Met Asp Gln Leu Ala Lys Thr Thr Gln Glu Thr Ile Asp Lys
     50                  55                  60

Thr Ala Asn Gln Ala Ser Asp Thr Phe Ser Gly Ile Gly Lys Lys Phe
 65                  70                  75                  80
```

Gly Leu Leu Lys

<210> 711
<211> 63
<212> PRT
<213> Homo sapiens

<400> 711
Arg Leu His Arg Tyr Pro Glu Ala Met Ala Ser Lys Gly Leu Gln Asp
 1   5   10   15

Leu Lys Gln Gln Val Glu Gly Thr Ala Gln Glu Ala Ala Met Asp Gln
            20   25   30

Leu Ala Lys Thr Thr Gln Glu Thr Ile Asp Lys Thr Ala Asn Gln Ala
            35   40   45

Ser Asp Thr Phe Ser Gly Ile Gly Lys Lys Phe Gly Leu Leu Lys
        50   55   60

<210> 712
<211> 86
<212> PRT
<213> Homo sapiens

<400> 712
Arg Leu Ala Asn Arg Ala Ile Met Ser His Lys Gln Ile Tyr Tyr Ser
 1   5   10   15

Asp Lys Tyr Asp Asp Glu Glu Phe Glu Tyr Arg His Val Met Leu Pro
            20   25   30

Lys Asp Ile Ala Lys Leu Val Pro Lys Thr His Leu Met Ser Glu Ser
            35   40   45

Glu Trp Arg Asn Leu Gly Val Gln Gln Ser Gln Gly Trp Val His Tyr
        50   55   60

Met Ile His Glu Pro Glu Pro His Ile Leu Leu Phe Arg Arg Pro Leu
65   70   75   80

Pro Lys Lys Pro Lys Lys
                85

```
<210> 713
<211> 193
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (129)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 713
Val Gln Lys Ala Gly Ala Arg Ala Leu Ala Val Ala Gly Ala Ala Arg
 1               5                   10                  15

Thr Pro Arg Ser Leu Pro Gly Arg Pro Ala Val Cys Asn Met Thr Leu
            20                  25                  30

Glu Glu Phe Ser Ala Gly Glu Gln Lys Thr Glu Arg Met Asp Lys Val
        35                  40                  45

Gly Asp Ala Leu Glu Glu Val Leu Ser Lys Ala Leu Ser Gln Arg Thr
    50                  55                  60

Ile Thr Val Gly Val Tyr Glu Ala Ala Lys Leu Leu Asn Val Asp Pro
65                  70                  75                  80

Asp Asn Val Val Leu Cys Leu Leu Ala Ala Asp Glu Asp Asp Asp Arg
            85                  90                  95

Asp Val Ala Leu Gln Ile His Phe Thr Leu Ile Gln Ala Phe Cys Cys
            100                 105                 110

Glu Asn Asp Ile Asn Ile Leu Arg Val Thr Thr Arg Ala Gly Trp Arg
        115                 120                 125

Xaa Pro Ala Leu Gly Asp Arg Arg Trp Pro Arg Gly Glu Arg Gly Arg
    130                 135                 140

Arg Ala Ala Pro Gly Pro Ala Leu Arg Val Val Thr Asn Pro His Ser
145                 150                 155                 160

Ser Gln Trp Lys Asp Pro Ala Leu Ser Gln Leu Ile Cys Phe Cys Arg
            165                 170                 175

Glu Ser Arg Tyr Met Asp Gln Trp Val Pro Val Ile Asn Leu Pro Glu
            180                 185                 190

Arg
```

```
<210> 714
<211> 200
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (190)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 714
Gly Pro Gly Ala Cys Ser Gly Pro Ala Pro Ser Pro Arg Arg Pro Gln
 1               5                  10                  15

Ser Val Lys Cys Glu Pro Arg Arg Arg Gly Arg Ile Trp Pro Gly Ala
                20                  25                  30

Gly Gly Gly Val Gly Ala Ala Arg His Val His His His Gln Gly Ala
            35                  40                  45

Gln Gln Ala Gly Arg Ala Ala Pro His Arg Ser His Ala Ala Ala Gly
        50                  55                  60

Gly Gly Pro Ala Arg Arg Ala Pro Glu Met Pro Ala Ala Arg Ala Ala
65                  70                  75                  80

Asp Leu Ala Ala Pro Ala Gly Ala Ala Xaa Cys Ala Xaa Pro Gly Pro
                85                  90                  95

Trp Pro Leu Ser Ser Pro Gly Pro Arg Leu Val Phe Asn Arg Val Asn
            100                 105                 110

Gly Arg Arg Ala Pro Ser Thr Ser Pro Ser Phe Glu Gly Thr Gln Glu
        115                 120                 125

Thr Tyr Thr Val Ala His Glu Glu Asn Val Arg Phe Val Ser Glu Ala
        130                 135                 140

Trp Gln Gln Val Gln Gln Gln Leu Asp Gly Gly Pro Ala Gly Glu Gly
```

688

```
        145              150              155              160

Gly Pro Arg Pro Val Gln Tyr Val Glu Arg Thr Pro Asn Pro Arg Leu
                165              170              175

Gln Asn Phe Val Pro Ile Asp Leu Asp Glu Trp Trp Ala Xaa Gln Phe
                180              185              190

Leu Ala Arg Ile Thr Ser Cys Ser
            195              200
```

```
<210> 715
<211> 106
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 715
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Leu Val Pro Xaa Leu
  1               5               10               15

Trp Ser Arg Glu Glu Ala Met Ala Thr Met Glu Asn Lys Val Ile Cys
                20              25              30

Ala Leu Val Leu Val Ser Met Leu Ala Leu Gly Thr Leu Ala Glu Ala
            35              40              45

Gln Thr Glu Thr Cys Thr Val Ala Pro Arg Glu Arg Gln Asn Cys Gly
        50              55              60

Phe Pro Gly Val Thr Pro Ser Gln Cys Ala Asn Lys Gly Cys Cys Phe
 65              70              75              80

Asp Asp Thr Val Arg Gly Val Pro Trp Cys Phe Tyr Pro Asn Thr Ile
                85              90              95

Asp Val Pro Pro Glu Glu Glu Cys Glu Phe
            100             105
```

```
<210> 716
<211> 105
<212> PRT
<213> Homo sapiens
```

<400> 716
Glu Gly Arg Glu Ala Gly Ser Gly Leu Ser Val Asp Ser Arg Asp Lys
 1   5   10   15

Gly His Glu Gly Arg Gly Leu Gly Pro Phe Arg Ile Pro Gln Asp Ser
            20   25   30

Gln Val Gln Leu Cys Gln Lys Gly Thr Phe His Val Met Gln Leu Arg
        35   40   45

Gly Leu Ser Leu Asn Pro Arg Leu Leu Leu Thr Leu Gly Ser Phe Asn
    50   55   60

Gln Val Gly Gln Pro Leu Leu Gln Arg Gly Val Gly Trp Leu Ser Ser
65   70   75   80

Leu Ser His Ala Ala Cys Glu Asp Arg Gly Gly Gly Val Gly Ser Gly
            85   90   95

Lys Ser Pro Glu Asn Arg Arg Gly Ile
            100   105

<210> 717
<211> 431
<212> PRT
<213> Homo sapiens

<400> 717
Arg Ala Ala Gly Ile Arg His Glu Arg Gly Gly Pro Thr Gly Ser Cys
 1   5   10   15

Pro Gly Leu Pro Ser Pro Pro Met Val Leu Tyr Ile Lys Tyr Pro Gly
            20   25   30

Trp Arg Ser His Met Leu Leu Thr Glu Gly Gly Asn Tyr His Ser Ser
            35   40   45

Leu Gly Thr Arg Cys Glu Leu Ser Cys Asp Arg Gly Phe Arg Leu Ile
    50   55   60

Gly Arg Arg Ser Val Gln Cys Leu Pro Ser Arg Arg Trp Ser Gly Thr
65   70   75   80

Ala Tyr Cys Arg Gln Met Arg Cys His Ala Leu Pro Phe Ile Thr Ser
            85   90   95

Gly Thr Tyr Thr Cys Thr Asn Gly Val Leu Leu Asp Ser Arg Cys Asp
            100   105   110

```
Tyr Ser Cys Ser Ser Gly Tyr His Leu Glu Gly Asp Arg Ser Arg Ile
        115             120             125

Cys Met Glu Asp Gly Arg Trp Ser Gly Gly Glu Pro Val Cys Val Asp
    130             135             140

Ile Asp Pro Pro Lys Ile Arg Cys Pro His Ser Arg Glu Lys Met Ala
145             150             155             160

Glu Pro Glu Lys Leu Thr Ala Arg Val Tyr Trp Asp Pro Pro Leu Val
            165             170             175

Lys Asp Ser Ala Asp Gly Thr Ile Thr Arg Val Thr Leu Arg Gly Pro
        180             185             190

Glu Pro Gly Ser His Phe Pro Glu Gly Glu His Val Ile Arg Tyr Thr
        195             200             205

Ala Tyr Asp Arg Ala Tyr Asn Arg Ala Ser Cys Lys Phe Ile Val Lys
    210             215             220

Val Gln Val Arg Arg Cys Pro Thr Leu Lys Pro Pro Gln His Gly Tyr
225             230             235             240

Leu Thr Cys Thr Ser Ala Gly Asp Asn Tyr Gly Ala Thr Cys Glu Tyr
            245             250             255

His Cys Asp Gly Gly Tyr Asp Arg Gln Gly Thr Pro Ser Arg Val Cys
        260             265             270

Gln Ser Ser Arg Gln Trp Ser Gly Ser Pro Pro Ile Cys Ala Pro Met
    275             280             285

Lys Ile Asn Val Asn Val Asn Ser Ala Ala Gly Leu Leu Asp Gln Phe
    290             295             300

Tyr Glu Lys Gln Arg Leu Leu Ile Ile Ser Ala Pro Asp Pro Ser Asn
305             310             315             320

Arg Tyr Tyr Lys Met Gln Ile Ser Met Leu Gln Gln Ser Thr Cys Gly
            325             330             335

Leu Asp Leu Arg His Val Thr Ile Ile Glu Leu Val Gly Gln Pro Pro
        340             345             350

Gln Glu Val Gly Arg Ile Arg Glu Gln Gln Leu Ser Ala Asn Ile Ile
        355             360             365

Glu Glu Leu Arg Gln Phe Gln Arg Leu Thr Arg Ser Tyr Phe Asn Met
    370             375             380
```

```
Val Leu Ile Asp Lys Gln Gly Ile Asp Arg Asp Arg Tyr Met Glu Pro
385           390           395           400

Val Thr Pro Glu Glu Ile Phe Thr Phe Ile Asp Asp Tyr Leu Leu Ser
          405           410           415

Asn Gln Glu Leu Thr Gln Arg Arg Glu Gln Arg Asp Ile Cys Glu
          420           425           430
```

```
<210> 718
<211> 417
<212> PRT
<213> Homo sapiens

<400> 718
Gln Gly Leu Pro Asp Gly Val Trp Ala His Gly Thr Cys Pro Gly His
 1           5           10           15

Arg Leu Val Ser Ser Gln Arg Arg Ile Ile Ala Ser Gly Ser Glu Asp
          20           25           30

Cys Thr Val Met Val Trp Gln Ile Pro Glu Asn Gly Leu Thr Ser Pro
          35           40           45

Leu Thr Glu Pro Val Val Val Leu Glu Gly His Thr Lys Arg Val Gly
          50           55           60

Ile Ile Ala Trp His Pro Thr Ala Arg Asn Val Leu Leu Ser Ala Gly
 65           70           75           80

Cys Asp Asn Val Val Leu Ile Trp Asn Val Gly Thr Ala Glu Glu Leu
          85           90           95

Tyr Arg Leu Asp Ser Leu His Pro Asp Leu Ile Tyr Asn Val Ser Trp
          100           105           110

Asn His Asn Gly Ser Leu Phe Cys Ser Ala Cys Lys Asp Lys Ser Val
          115           120           125

Arg Ile Ile Asp Pro Arg Arg Gly Thr Leu Val Ala Glu Arg Glu Lys
          130           135           140

Ala His Glu Gly Ala Arg Pro Met Arg Ala Ile Phe Leu Ala Asp Gly
145           150           155           160

Lys Val Phe Thr Thr Gly Phe Ser Arg Met Ser Glu Arg Gln Leu Ala
          165           170           175
```

692

```
Leu Trp Asp Pro Glu Asn Leu Glu Glu Pro Met Ala Leu Gln Glu Leu
        180                 185             190

Asp Ser Ser Asn Gly Ala Leu Leu Pro Phe Tyr Asp Pro Asp Thr Ser
        195                 200             205

Val Val Tyr Val Cys Gly Lys Gly Asp Ser Ser Ile Arg Tyr Phe Glu
    210             215             220

Ile Thr Glu Glu Pro Pro Tyr Ile His Phe Leu Asn Thr Phe Thr Ser
225             230             235             240

Lys Glu Pro Gln Arg Gly Met Gly Ser Met Pro Lys Arg Gly Leu Glu
            245             250             255

Val Ser Lys Cys Glu Ile Ala Arg Phe Tyr Lys Leu His Glu Arg Lys
        260             265             270

Cys Glu Pro Ile Val Met Thr Val Pro Arg Lys Ser Asp Leu Phe Gln
        275             280             285

Asp Asp Leu Tyr Pro Asp Thr Ala Gly Pro Glu Ala Ala Leu Glu Ala
    290             295             300

Glu Glu Trp Val Ser Gly Arg Asp Ala Asp Pro Ile Leu Ile Ser Leu
305             310             315             320

Arg Glu Ala Tyr Val Pro Ser Lys Gln Arg Asp Leu Lys Ile Ser Arg
            325             330             335

Arg Asn Val Leu Ser Asp Ser Arg Pro Ala Met Ala Pro Gly Ser Ser
        340             345             350

His Leu Gly Ala Pro Ala Ser Thr Thr Thr Ala Ala Asp Ala Thr Pro
        355             360             365

Ser Gly Ser Leu Ala Arg Ala Gly Glu Ala Gly Lys Leu Glu Glu Val
    370             375             380

Met Gln Glu Leu Arg Ala Leu Arg Ala Leu Val Lys Glu Gln Gly Asp
385             390             395             400

Arg Ile Cys Arg Leu Glu Glu Gln Leu Gly Arg Met Glu Asn Gly Asp
            405             410             415

Ala
```

<210> 719

```
<211> 290
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (131)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 719
Glu Leu Ser Ala Ser Ala Xaa Asp Asp Gly Asn Phe Ser Leu Leu Ile
 1               5                  10                  15

Arg Ala Val Glu Glu Thr Asp Ala Gly Leu Tyr Thr Cys Asn Leu His
            20                  25                  30

His His Tyr Cys His Leu Tyr Glu Ser Leu Ala Val Arg Leu Glu Val
            35                  40                  45

Thr Asp Gly Pro Pro Ala Pro Pro Thr Gly Thr Ala Arg Arg Arg
        50                  55                  60

Cys Trp Arg Trp Arg Ala Ala Pro Ala Xaa Leu Thr Cys Val Asn Arg
65              70                  75                  80

Gly His Val Trp Thr Asp Arg His Val Glu Glu Ala Gln Gln Val Val
                85                  90                  95

His Trp Asp Arg Gln Pro Pro Gly Val Pro His Asp Arg Ala Asp Arg
            100                 105                 110

Leu Leu Asp Leu Tyr Ala Ser Ala Ser Ala Ala Leu Arg Ala Pro Phe
            115                 120                 125

Ser Ala Xaa Arg Val Ala Val Gly Ala Asp Ala Phe Lys Arg Gly Asp
        130                 135                 140

Phe Ser Leu Arg Ile Glu Pro Leu Glu Val Ala Asp Glu Gly Thr Tyr
145                 150                 155                 160

Ser Cys His Leu His His His Tyr Trp Arg Ala Ala Thr Thr Ser Ser
```

694

```
                   165                  170                  175

    Met Ser Ser Ser Pro Arg Ala Glu Pro Thr Ser Ser Ser Ser Trp Ala
                180              185              190

    Thr Cys Trp Pro Arg Cys Cys Ser Ser Ser Cys Tyr Trp Ser Leu Ser
                195              200              205

    Ser Trp Pro Pro Ala Gly Arg Gly Gly Tyr Glu Tyr Ser Asp Gln Lys
        210              215              220

    Ser Gly Lys Ser Lys Gly Lys Asp Val Asn Leu Ala Glu Phe Ala Val
    225              230              235              240

    Ala Ala Gly Asp Gln Met Leu Tyr Arg Ser Glu Asp Ile Gln Leu Asp
                245              250              255

    Tyr Lys Asn Asn Ile Leu Lys Glu Arg Ala Glu Leu Ala His Ser Pro
                260              265              270

    Leu Pro Ala Lys Tyr Ile Asp Leu Asp Lys Gly Phe Arg Lys Glu Asn
        275              280              285

    Cys Lys
        290
```

<210> 720
<211> 459
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 720
```
Asp Ala His Pro Lys Pro Cys Cys Glu Thr Ser Ala Ala Ala Cys Arg
    1               5               10              15

Leu Val Glu Arg Ile Leu Thr Ser Trp Glu Glu Asn Asp Arg Val Gln
                20              25              30

Cys Ala Gly Gly Pro Arg Lys Gly Tyr Met Gly His Leu Thr Arg Val
            35              40              45

Ala Xaa Ala Leu Val Gln Asn Thr Glu Lys Gly Pro Asn Ala Glu Gln
    50              55              60
```

```
Leu Arg Gln Leu Leu Lys Glu Leu Pro Ser Glu Gln Gln Glu Gln Trp
 65              70              75              80

Glu Ala Phe Val Ser Gly Pro Leu Ala Glu Thr Asn Lys Lys Asn Met
            85              90                  95

Val Asp Leu Val Asn Thr His His Leu His Ser Ser Ser Asp Asp Glu
        100             105             110

Asp Asp Arg Leu Lys Glu Phe Asn Phe Pro Glu Glu Ala Val Leu Gln
        115             120             125

Gln Ala Phe Met Asp Phe Gln Met Gln Arg Met Thr Ser Ala Phe Ile
    130             135             140

Asp His Phe Gly Phe Asn Asp Glu Glu Phe Gly Glu Gln Glu Glu Ser
145             150             155             160

Val Asn Ala Pro Phe Asp Lys Thr Ala Asn Ile Thr Phe Ser Leu Asn
            165             170             175

Ala Asp Asp Glu Asn Pro Asn Ala Asn Leu Leu Glu Ile Cys Tyr Lys
        180             185             190

Asp Arg Ile Gln Gln Phe Asp Asp Asp Glu Glu Glu Glu Asp Glu Glu
        195             200             205

Glu Ala Gln Gly Ser Gly Glu Ser Asp Gly Glu Asp Gly Ala Trp Gln
    210             215             220

Gly Ser Gln Leu Ala Arg Gly Ala Arg Leu Gly Gln Pro Pro Gly Val
225             230             235             240

Arg Ser Gly Gly Ser Thr Asp Ser Glu Asp Glu Glu Glu Glu Asp Glu
            245             250             255

Glu Glu Glu Glu Asp Glu Glu Gly Ile Gly Cys Ala Ala Arg Gly Gly
        260             265             270

Ala Thr Pro Leu Ser Tyr Pro Ser Pro Gly Pro Gln Pro Pro Gly Pro
    275             280             285

Ser Trp Thr Ala Thr Phe Asp Pro Val Pro Thr Asp Ala Pro Thr Ser
    290             295             300

Pro Arg Val Ser Gly Glu Glu Glu Leu His Thr Gly Pro Pro Ala Pro
305             310             315             320

Gln Gly Pro Leu Ser Val Pro Gln Gly Leu Pro Thr Gln Ser Leu Ala
            325             330             335
```

```
Ser Pro Pro Ala Arg Asp Ala Leu Gln Leu Arg Ser Gln Asp Pro Thr
            340             345             350

Pro Pro Ser Ala Pro Gln Glu Ala Thr Glu Gly Ser Lys Val Thr Glu
            355             360             365

Pro Ser Ala Pro Cys Gln Ala Leu Val Ser Ile Gly Asp Leu Gln Ala
    370             375             380

Thr Phe His Gly Ile Arg Ser Ala Pro Ser Ser Ser Asp Ser Ala Thr
385             390             395             400

Arg Asp Pro Ser Thr Ser Val Pro Ala Ser Gly Ala His Gln Pro Pro
            405             410             415

Gln Thr Thr Glu Gly Glu Lys Ser Pro Glu Pro Leu Gly Leu Pro Gln
            420             425             430

Ser Gln Ser Ala Gln Ala Leu Thr Pro Pro Pro Ile Pro Asn Gly Ser
        435             440             445

Ala Pro Glu Gly Pro Ala Ser Pro Gly Ser Gln
    450             455
```

<210> 721
<211> 523
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (194)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (327)
<223> Xaa equals any of the naturally occurring L-amino acids

697

```
<400> 721
Leu Gln Arg Leu Lys Leu Ile Lys Pro Leu Leu Xaa Phe Glu Ser Leu
 1               5                  10              15

Glu Glu Cys Tyr Met Ala Lys Ile Leu Val Ala Glu Gly Thr Arg Asp
            20              25              30

Val Pro Ile Gly Ala Ile Ile Cys Ile Thr Val Gly Lys Pro Glu Asp
        35              40              45

Ile Glu Ala Phe Lys Asn Tyr Thr Leu Asp Ser Ser Ala Ala Pro Thr
    50              55              60

Pro Gln Ala Ala Pro Ala Pro Thr Pro Ala Ala Thr Ala Ser Pro Pro
65              70              75              80

Thr Pro Ser Ala Gln Ala Pro Gly Ser Ser Tyr Pro Pro His Met Gln
                85              90              95

Val Leu Leu Pro Ala Leu Ser Pro Thr Met Thr Met Gly Thr Val Gln
            100             105             110

Arg Trp Xaa Lys Lys Val Gly Glu Lys Leu Ser Glu Gly Asp Leu Leu
        115             120             125

Ala Glu Ile Glu Thr Asp Lys Ala Thr Ile Gly Phe Glu Val Gln Glu
    130             135             140

Glu Gly Tyr Leu Ala Lys Ile Leu Val Pro Glu Gly Thr Arg Asp Val
145             150             155             160

Pro Leu Gly Thr Pro Leu Cys Ile Ile Val Glu Lys Glu Ala Asp Ile
                165             170             175

Ser Ala Phe Ala Asp Tyr Arg Pro Thr Glu Val Thr Asp Leu Lys Pro
            180             185             190

Gln Xaa Pro Pro Pro Thr Pro Pro Pro Val Ala Ala Val Pro Pro Thr
        195             200             205

Pro Gln Pro Leu Ala Pro Thr Pro Ser Ala Pro Cys Pro Ala Thr Pro
    210             215             220

Ala Gly Pro Lys Gly Arg Val Phe Val Ser Pro Leu Ala Lys Lys Leu
225             230             235             240

Ala Val Glu Lys Gly Ile Asp Leu Thr Gln Val Lys Gly Thr Gly Pro
                245             250             255

Asp Gly Arg Ile Thr Lys Lys Asp Ile Asp Ser Phe Val Pro Ser Lys
            260             265             270
```

```
Val Ala Pro Ala Pro Ala Ala Val Val Pro Pro Thr Gly Pro Gly Met
    275                 280                 285

Ala Pro Val Pro Thr Gly Val Phe Thr Asp Ile Pro Ile Ser Asn Ile
    290                 295                 300

Arg Arg Val Ile Ala Gln Arg Leu Met Gln Ser Lys Gln Thr Ile Pro
305                 310                 315                 320

His Tyr Tyr Leu Ser Ile Xaa Val Asn Met Gly Glu Val Leu Leu Val
                325                 330                 335

Arg Lys Glu Leu Asn Lys Ile Leu Glu Gly Arg Ser Lys Ile Ser Val
            340                 345                 350

Asn Asp Phe Ile Ile Lys Ala Ser Ala Leu Ala Cys Leu Lys Val Pro
            355                 360                 365

Glu Ala Asn Ser Ser Trp Met Asp Thr Val Ile Arg Gln Asn His Val
    370                 375                 380

Val Asp Val Ser Val Ala Val Ser Thr Pro Ala Gly Leu Ile Thr Pro
385                 390                 395                 400

Ile Val Phe Asn Ala His Ile Lys Gly Val Glu Thr Ile Ala Asn Asp
                405                 410                 415

Val Val Ser Leu Ala Thr Lys Ala Arg Glu Gly Lys Leu Gln Pro His
            420                 425                 430

Glu Phe Gln Gly Gly Thr Phe Thr Ile Ser Asn Leu Gly Met Phe Gly
            435                 440                 445

Ile Lys Asn Phe Ser Ala Ile Ile Asn Pro Pro Gln Ala Cys Ile Leu
    450                 455                 460

Ala Ile Gly Ala Ser Glu Asp Lys Leu Val Pro Ala Asp Asn Glu Lys
465                 470                 475                 480

Gly Phe Asp Val Ala Ser Met Met Ser Val Thr Leu Ser Cys Asp His
                485                 490                 495

Arg Val Val Asp Gly Ala Val Gly Ala Gln Trp Leu Ala Glu Phe Arg
            500                 505                 510

Lys Tyr Leu Glu Lys Pro Ile Thr Met Leu Leu
    515                 520
```

699

```
<210> 722
<211> 111
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 722
Ser Ser Arg Ser Arg Ala Ala Asp Glu Xaa Ala Leu Cys Leu Gln Cys
 1               5                  10                  15

Asp Met Asn Asp Cys Tyr Ser Arg Leu Arg Arg Leu Val Pro Thr Ile
            20                  25                  30

Pro Pro Asn Lys Lys Val Ser Lys Val Glu Ile Leu Gln His Val Ile
            35                  40                  45

Asp Tyr Ile Leu Asp Leu Gln Leu Ala Leu Glu Thr His Pro Ala Leu
    50                  55                  60

Leu Arg Gln Pro Pro Pro Pro Ala Pro Pro His His Pro Ala Gly Thr
65                  70                  75                  80

Cys Pro Ala Ala Pro Pro Arg Thr Pro Leu Thr Ala Leu Asn Thr Asp
            85                  90                  95

Pro Ala Gly Ala Val Asn Lys Gln Gly Asp Ser Ile Leu Cys Arg
            100                 105                 110


<210> 723
<211> 190
<212> PRT
<213> Homo sapiens

<400> 723
Ser Gly Gly Gly Gly Gly Arg Met Ile Lys Leu Phe Ser Leu Lys Gln
 1               5                  10                  15

Gln Lys Lys Glu Glu Glu Ser Ala Gly Gly Thr Lys Gly Ser Ser Lys
            20                  25                  30

Lys Ala Ser Ala Ala Gln Leu Arg Ile Gln Lys Asp Ile Asn Glu Leu
            35                  40                  45

Asn Leu Pro Lys Thr Cys Asp Ile Ser Phe Ser Asp Pro Asp Asp Leu
    50                  55                  60
```

700

```
Leu Asn Phe Lys Leu Val Ile Cys Pro Asp Glu Gly Phe Tyr Lys Ser
65               70               75               80

Gly Lys Phe Val Phe Ser Phe Lys Val Gly Gln Gly Tyr Pro His Asp
             85               90               95

Pro Pro Lys Val Lys Cys Glu Thr Met Val Tyr His Pro Asn Ile Asp
             100              105              110

Leu Glu Gly Asn Val Cys Leu Asn Ile Leu Arg Glu Asp Trp Lys Pro
         115              120              125

Val Leu Thr Ile Asn Ser Ile Ile Tyr Gly Leu Gln Tyr Leu Phe Leu
         130              135              140

Glu Pro Asn Pro Glu Asp Pro Leu Asn Lys Glu Ala Ala Glu Val Leu
145              150              155              160

Gln Asn Asn Arg Arg Leu Phe Glu Gln Asn Val Gln Arg Ser Met Arg
             165              170              175

Gly Gly Tyr Ile Gly Ser Thr Tyr Phe Glu Arg Cys Leu Lys
             180              185              190
```

<210> 724
<211> 524
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (247)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (417)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (440)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (443)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<400> 724
Arg Arg Arg Arg Ala Asp Arg Ala Thr Pro Arg Glu Val Leu Glu Thr
 1               5                 10                  15

Pro Gly Ala Ala Ser Val Gln Thr Leu Pro Ser Val Thr Met Lys Leu
             20                 25                  30

Trp Val Ser Ala Leu Leu Met Ala Trp Phe Gly Val Leu Ser Cys Val
         35                 40                  45

Gln Ala Glu Phe Phe Thr Ser Ile Gly His Met Thr Asp Leu Ile Tyr
     50                 55                 60

Ala Glu Lys Glu Leu Val Gln Ser Leu Lys Glu Tyr Ile Leu Val Glu
 65                 70                 75                  80

Glu Ala Lys Leu Ser Lys Ile Lys Ser Trp Ala Asn Lys Met Glu Ala
             85                 90                  95

Leu Thr Ser Lys Ser Ala Ala Asp Ala Glu Gly Tyr Leu Ala His Pro
             100                105                110

Val Asn Ala Tyr Lys Leu Val Lys Arg Leu Asn Thr Asp Trp Pro Ala
         115                120                125

Leu Glu Asp Leu Val Leu Gln Asp Ser Ala Ala Gly Phe Ile Ala Asn
     130                135                140

Leu Ser Val Gln Arg Gln Phe Phe Pro Thr Asp Glu Asp Glu Ile Gly
145                150                155                160

Ala Ala Lys Ala Leu Met Arg Leu Gln Asp Thr Tyr Arg Leu Asp Pro
             165                170                175

Gly Thr Ile Ser Arg Gly Glu Leu Pro Gly Thr Lys Tyr Gln Ala Met
             180                185                190

Leu Ser Val Asp Asp Cys Phe Gly Met Gly Arg Ser Ala Tyr Asn Glu
         195                200                205

Gly Asp Tyr Tyr His Thr Val Leu Trp Met Glu Gln Val Leu Lys Gln
     210                215                220

Leu Asp Ala Gly Glu Glu Ala Thr Thr Thr Lys Ser Gln Val Leu Asp
225                230                235                240

Tyr Leu Ser Tyr Ala Val Xaa Gln Leu Gly Asp Leu His Arg Ala Leu
             245                250                255

Glu Leu Thr Arg Arg Leu Leu Ser Leu Asp Pro Ser His Glu Arg Ala
```

702

```
                    260                265                270

      Gly Gly Asn Leu Arg Tyr Phe Glu Gln Leu Leu Glu Glu Glu Arg Glu
              275                280                285

      Lys Thr Leu Thr Asn Gln Thr Glu Ala Glu Leu Ala Thr Pro Glu Gly
              290                295                300

      Ile Tyr Glu Arg Pro Val Asp Tyr Leu Pro Glu Arg Asp Val Tyr Glu
      305                310                315                320

      Ser Leu Cys Arg Gly Glu Gly Val Lys Leu Thr Pro Arg Arg Gln Lys
                  325                330                335

      Arg Leu Phe Cys Arg Tyr His His Gly Asn Arg Ala Pro Gln Leu Leu
              340                345                350

      Ile Ala Pro Phe Lys Glu Glu Asp Glu Trp Asp Ser Pro His Ile Val
              355                360                365

      Arg Tyr Tyr Asp Val Met Ser Asp Glu Glu Ile Glu Arg Ile Lys Glu
      370                375                380

      Ile Ala Lys Pro Lys Leu Ala Arg Ala Thr Val Arg Asp Pro Lys Thr
      385                390                395                400

      Gly Val Leu Thr Val Ala Ser Tyr Arg Val Ser Lys Ser Ser Trp Leu
                  405                410                415

      Xaa Glu Asp Asp Asp Pro Val Val Ala Arg Val Asn Arg Arg Met Gln
              420                425                430

      His Ile Thr Gly Leu Thr Val Xaa Thr Ala Xaa Leu Leu Gln Val Ala
              435                440                445

      Asn Tyr Gly Val Gly Gly Gln Tyr Glu Pro His Phe Asp Phe Ser Arg
          450                455                460

      Asn Asp Glu Arg Asp Thr Phe Lys His Leu Gly Thr Gly Asn Arg Val
      465                470                475                480

      Ala Thr Phe Leu Asn Tyr Met Ser Asp Val Glu Ala Gly Gly Ala Thr
                  485                490                495

      Val Phe Pro Asp Leu Gly Ala Ala Ile Trp Pro Lys Lys Gly Thr Ala
              500                505                510

      Val Phe Trp Tyr Asn Leu Leu Arg Ser Gly Arg Arg
          515                520
```

```
<210> 725
<211> 92
<212> PRT
<213> Homo sapiens

<400> 725
Leu Lys Met Thr Ser Leu Phe Ala Gln Glu Ile Arg Leu Ser Lys Arg
 1               5                  10.                 15

His Glu Glu Ile Val Ser Gln Arg Leu Met Leu Leu Gln Gln Met Glu
                20                  25                  30

Asn Lys Leu Gly Asp Gln His Thr Glu Lys Ala Ser Gln Leu Gln Thr
        35              40                  45

Val Glu Thr Ala Phe Lys Arg Asn Leu Ser Leu Leu Lys Asp Ile Glu
    50                  55                  60

Ala Ala Glu Lys Ser Leu Gln Thr Arg Ile His Pro Leu Pro Arg Pro
65                  70                  75                  80

Glu Val Val Ser Leu Glu Thr Arg Tyr Trp Ala Ser
                85                  90
```

```
<210> 726
<211> 690
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (383)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (688)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (690)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 726
Val Ser Arg Ser Pro Arg Val Pro Leu Pro Pro Arg Ser Phe Ser Arg
 1               5                  10                  15

Met Ala Gly Asp Ser Thr Ala Thr Ser Arg Arg Leu Gly Ala Ala Pro
            20                  25                  30

Asp Arg Ala Ala Pro His Ile Leu Pro Ala Gly Ala His Arg Ala Ala
        35                  40                  45

Thr Ala Pro Gly Leu Gly Gly Gly Pro Glu Pro Leu Gly Arg Ala Leu
     50                  55                  60

Ala Gly Gly Leu Arg Gly Pro Gln Gly Asn Gly Trp Leu Gln Glu Arg
65                  70                  75                  80

Lys Arg Arg Cys Pro Gly Leu Ala Gly Cys Phe Glu Ala Ile Ser Cys
                85                  90                  95

Gly Thr Gly Leu Gly Leu Pro Gly Leu Ala Leu Xaa Arg Glu Leu Ile
            100                 105                 110

Ser Trp Gly Ala Pro Gly Ser Ala Asp Ser Xaa Arg Leu Leu His Trp
        115                 120                 125

Gly Ser His Pro Thr Ala Phe Val Val Ser Tyr Ala Ala Ala Leu Pro
    130                 135                 140

Ala Ala Ala Leu Trp His Lys Leu Gly Ser Leu Trp Val Pro Gly Gly
145                 150                 155                 160

Gln Gly Gly Ser Gly Asn Pro Val Arg Arg Leu Leu Gly Cys Leu Gly
                165                 170                 175

Ser Glu Thr Arg Arg Leu Ser Leu Phe Leu Val Leu Val Val Leu Ser
            180                 185                 190

Ser Leu Gly Glu Met Ala Ile Pro Phe Phe Thr Gly Arg Leu Thr Asp
        195                 200                 205

Trp Ile Leu Gln Asp Gly Ser Ala Asp Thr Phe Thr Arg Asn Leu Thr
    210                 215                 220

Leu Met Ser Ile Leu Thr Ile Ala Ser Ala Val Leu Glu Phe Val Gly
225                 230                 235                 240
```

705

```
Asp Gly Ile Tyr Asn Asn Thr Met Gly His Val His Ser His Leu Gln
            245                 250             255

Gly Glu Val Phe Gly Ala Val Leu Arg Gln Glu Thr Glu Phe Phe Gln
            260                 265             270

Gln Asn Gln Thr Gly Asn Ile Met Ser Arg Val Thr Glu Asp Thr Ser
        275                 280             285

Thr Leu Ser Asp Ser Leu Ser Glu Asn Leu Ser Leu Phe Leu Trp Tyr
    290             295             300

Leu Val Arg Gly Leu Cys Leu Leu Gly Ile Met Leu Trp Gly Ser Val
305             310             315                 320

Ser Leu Thr Met Val Thr Leu Ile Thr Leu Pro Leu Leu Phe Leu Leu
            325                 330             335

Pro Lys Lys Val Gly Lys Trp Tyr Gln Leu Leu Glu Val Gln Val Arg
            340                 345             350

Glu Ser Leu Ala Lys Ser Ser Gln Val Ala Ile Glu Ala Leu Ser Ala
        355                 360             365

Met Pro Thr Val Arg Ser Phe Ala Asn Glu Glu Gly Glu Ala Xaa Lys
    370                 375             380

Phe Arg Glu Lys Leu Gln Glu Ile Lys Thr Leu Asn Gln Lys Glu Ala
385             390             395             400

Val Ala Tyr Ala Val Asn Ser Trp Thr Thr Ser Ile Ser Gly Met Leu
            405                 410             415

Leu Lys Val Gly Ile Leu Tyr Ile Gly Gly Gln Leu Val Thr Ser Gly
            420                 425             430

Ala Val Ser Ser Gly Asn Leu Val Thr Phe Val Leu Tyr Gln Met Gln
        435                 440             445

Phe Thr Gln Ala Val Glu Val Leu Leu Ser Ile Tyr Pro Arg Val Gln
    450             455             460

Lys Ala Val Gly Ser Ser Glu Lys Ile Phe Glu Tyr Leu Asp Arg Thr
465             470             475             480

Pro Arg Cys Pro Pro Ser Gly Leu Leu Thr Pro Leu His Leu Glu Gly
            485                 490             495

Leu Val Gln Phe Gln Asp Val Ser Phe Ala Tyr Pro Asn Arg Pro Asp
            500                 505             510
```

```
Val Leu Val Leu Gln Gly Leu Thr Phe Thr Leu Arg Pro Gly Glu Val
        515                 520                 525

Thr Ala Leu Val Gly Pro Asn Gly Ser Gly Lys Ser Thr Val Ala Ala
    530                 535                 540

Leu Leu Gln Asn Leu Tyr Gln Pro Thr Gly Gly Gln Leu Leu Leu Asp
545                 550                 555                 560

Gly Lys Pro Leu Pro Gln Tyr Glu His Arg Tyr Leu His Arg Gln Val
            565                 570                 575

Ala Ala Val Gly Gln Glu Pro Gln Val Phe Gly Arg Ser Leu Gln Glu
            580                 585                 590

Asn Ile Ala Tyr Gly Leu Thr Gln Lys Pro Thr Met Glu Glu Ile Thr
        595                 600                 605

Ala Ala Ala Val Lys Ser Gly Ala His Ser Phe Ile Ser Gly Leu Pro
    610                 615                 620

Gln Gly Tyr Asp Thr Glu Val Asp Glu Ala Gly Ser Gln Leu Ser Gly
625                 630                 635                 640

Gly Gln Arg Gln Ala Val Ala Leu Ala Arg Ala Leu Ile Arg Lys Pro
            645                 650                 655

Cys Val Leu Ile Leu Asp Asp Ala Thr Ser Ala Leu Asp Ala Asn Ser
            660                 665                 670

Gln Leu Gln Val Glu Gln Leu Leu Tyr Glu Ser Pro Glu Arg Tyr Xaa
        675                 680                 685

Arg Xaa
    690
```

```
<210> 727
<211> 82
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

707

```
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 727
Thr Pro Pro Leu Val Ser Ser Val Ala Ala Leu Asp Ser His Arg Ser
 1               5                   10                  15


Thr Asn Pro Ile Val Asn Ser Ala Cys Lys Gly Ser Arg Leu Cys Ala
            20                  25                  30


Pro Tyr Glu Asn Leu Met Pro Asp Asp Leu Arg Xaa Asn Ser Phe Ile
        35                  40                  45


Leu Lys Pro Pro Phe Thr Leu Gln Ser Val Glu Lys Leu Ser Ser Thr
    50                  55                  60


Lys Leu Val Pro Gly Ala Lys Asn Xaa Gly Asp Arg Cys Ser Arg Glu
65                  70                  75                  80


Arg Ser
```

```
<210> 728
<211> 600
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (479)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (550)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (588)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

```
<222> (590)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 728
Ser Arg Val Lys Pro Arg Val Arg Gly Thr Xaa Val Arg Thr Pro Gly
 1               5                  10                 15

Ser Arg Arg Gly Arg His Gly Ala Val Pro Gly Asp Trp Glu Ala Ala
            20              25              30

Ala Gln Ala Arg Gly Ala Gly Gln Arg Leu Pro Thr Pro Ser Glu Ile
        35              40              45

Leu Ser Asn Ala Gly Leu Arg Phe Glu Val Val Pro Ser Lys Phe Lys
    50              55              60

Glu Lys Leu Asp Lys Ala Ser Phe Ala Thr Pro Tyr Gly Tyr Ala Met
65              70              75                  80

Glu Thr Ala Lys Gln Lys Ala Leu Glu Val Ala Asn Arg Leu Tyr Gln
            85              90                  95

Lys Asp Leu Arg Ala Pro Asp Val Val Ile Gly Ala Asp Thr Ile Val
            100             105             110

Thr Val Gly Gly Leu Ile Leu Glu Lys Pro Val Asp Lys Gln Asp Ala
        115             120             125

Tyr Arg Met Leu Ser Arg Leu Ser Gly Arg Glu His Ser Val Phe Thr
130             135             140

Gly Val Ala Ile Val His Cys Ser Ser Lys Asp His Gln Leu Asp Thr
145             150             155             160

Arg Val Ser Glu Phe Tyr Glu Glu Thr Lys Val Lys Phe Ser Glu Leu
            165             170             175

Ser Glu Glu Leu Leu Trp Glu Tyr Val His Ser Gly Glu Pro Met Asp
            180             185             190

Lys Ala Gly Gly Tyr Gly Ile Gln Ala Leu Gly Gly Met Leu Val Glu
        195             200             205

Ser Val His Gly Asp Phe Leu Asn Val Val Gly Phe Pro Leu Asn His
    210             215             220

Phe Cys Lys Gln Leu Val Lys Leu Tyr Tyr Pro Pro Arg Pro Glu Asp
225             230             235             240

Leu Arg Arg Ser Val Lys His Asp Ser Ile Pro Ala Ala Asp Thr Phe
            245             250             255
```

```
Glu Asp Leu Ser Asp Val Glu Gly Gly Gly Ser Glu Pro Thr Gln Arg
        260             265             270

Asp Ala Gly Ser Arg Asp Glu Lys Ala Glu Ala Gly Glu Ala Gly Gln
        275             280             285

Ala Thr Ala Glu Ala Glu Cys His Arg Thr Arg Glu Thr Leu Pro Pro
    290             295             300

Phe Pro Thr Arg Leu Leu Glu Leu Ile Glu Gly Phe Met Leu Ser Lys
305             310             315             320

Gly Leu Leu Thr Ala Cys Lys Leu Lys Val Phe Asp Leu Leu Lys Asp
            325             330             335

Glu Ala Pro Gln Lys Ala Ala Asp Ile Ala Ser Lys Val Asp Ala Ser
            340             345             350

Ala Cys Gly Met Glu Arg Leu Leu Asp Ile Cys Ala Ala Met Gly Leu
        355             360             365

Leu Glu Lys Thr Glu Gln Gly Tyr Ser Asn Thr Glu Thr Ala Asn Val
    370             375             380

Tyr Leu Ala Ser Asp Gly Glu Tyr Ser Leu His Gly Phe Ile Met His
385             390             395             400

Asn Asn Asp Leu Thr Trp Asn Leu Phe Thr Tyr Leu Glu Phe Ala Ile
            405             410             415

Arg Glu Gly Thr Asn Gln His His Arg Ala Leu Gly Lys Lys Ala Glu
            420             425             430

Asp Leu Phe Gln Asp Ala Tyr Tyr Gln Ser Pro Glu Thr Arg Leu Arg
        435             440             445

Phe Met Arg Ala Met His Gly Met Thr Lys Leu Thr Ala Cys Gln Val
    450             455             460

Ala Thr Ala Phe Asn Leu Ser Arg Phe Ser Ala Cys Asp Xaa Gly
465             470             475             480

Gly Cys Thr Gly Ala Leu Ala Arg Glu Leu Ala Arg Glu Tyr Pro Arg
            485             490             495

Met Gln Val Thr Val Phe Asp Leu Pro Asp Ile Ile Glu Leu Ala Ala
            500             505             510

His Phe Gln Pro Pro Gly Pro Gln Gln Cys Arg Ser Thr Ser Gln Gln
        515             520             525
```

710

```
Val Thr Phe Ser Gly Thr Pro Ser Pro Ala Leu Ser Cys Thr Ser Cys
    530               535           540

Ala Gly Ser Cys Met Xaa Gly Gln Thr Thr Lys Ser Thr Ser Tyr Ser
545               550           555               560

Ala Gly Ser Pro Arg Ala Ala Ser Gln Gly Pro Ala Cys Cys Trp Trp
              565           570           575

Arg Arg Ser Trp Met Arg Arg Arg Gly Trp Arg Xaa Arg Xaa Asp Ala
              580           585           590

Val Thr Glu His Ala Gly Ala Asp
    595           600
```

```
<210> 729
<211> 535
<212> PRT
<213> Homo sapiens

<400> 729
Gly Arg Ser Ser Phe Thr Ser Leu Val Val Gly Val Phe Val Val Tyr
  1           5               10              15

Val Val His Thr Cys Trp Val Met Tyr Gly Ile Val Tyr Thr Arg Pro
              20              25              30

Cys Ser Gly Asp Ala Asn Cys Ile Gln Pro Tyr Leu Ala Arg Arg Pro
          35              40              45

Lys Leu Gln Leu Ser Val Tyr Thr Thr Thr Arg Ser His Leu Gly Ala
    50              55              60

Glu Asn Asn Ile Asp Leu Val Leu Asn Val Glu Asp Phe Asp Val Glu
65              70              75              80

Ser Lys Phe Glu Arg Thr Val Asn Val Ser Val Pro Lys Lys Thr Arg
              85              90              95

Asn Asn Gly Thr Leu Tyr Ala Tyr Ile Phe Leu His His Ala Gly Val
              100             105             110

Leu Pro Trp His Asp Gly Lys Gln Val His Leu Val Ser Pro Leu Thr
    115             120             125

Thr Tyr Met Val Pro Lys Pro Glu Glu Ile Asn Leu Leu Thr Gly Glu
    130             135             140
```

```
Ser Asp Thr Gln Gln Ile Glu Ala Glu Lys Lys Pro Thr Ser Ala Leu
145                 150                 155                 160

Asp Glu Pro Val Ser His Trp Arg Pro Arg Leu Ala Leu Asn Val Met
                165                 170                 175

Ala Asp Asn Phe Val Phe Asp Gly Ser Ser Leu Pro Ala Asp Val His
            180                 185                 190

Arg Tyr Met Lys Met Ile Gln Leu Gly Lys Thr Val His Tyr Leu Pro
        195                 200                 205

Ile Leu Phe Ile Asp Gln Leu Ser Asn Arg Val Lys Asp Leu Met Val
    210                 215                 220

Ile Asn Arg Ser Thr Thr Glu Leu Pro Leu Thr Val Ser Tyr Asp Lys
225                 230                 235                 240

Val Ser Leu Gly Arg Leu Arg Phe Trp Ile His Met Gln Asp Ala Val
            245                 250                 255

Tyr Ser Leu Gln Gln Phe Gly Phe Ser Glu Lys Asp Ala Asp Glu Val
            260                 265                 270

Lys Gly Ile Phe Val Asp Thr Asn Leu Tyr Phe Leu Ala Leu Thr Phe
        275                 280                 285

Phe Val Ala Ala Phe His Leu Leu Phe Asp Phe Leu Ala Phe Lys Asn
    290                 295                 300

Asp Ile Ser Phe Trp Lys Lys Lys Lys Ser Met Ile Gly Met Ser Thr
305                 310                 315                 320

Lys Ala Val Leu Trp Arg Cys Phe Ser Thr Val Val Ile Phe Leu Phe
            325                 330                 335

Leu Leu Asp Glu Gln Thr Ser Leu Leu Val Leu Val Pro Ala Gly Val
            340                 345                 350

Gly Ala Ala Ile Glu Leu Trp Lys Val Lys Lys Ala Leu Lys Met Thr
        355                 360                 365

Ile Phe Trp Arg Gly Leu Met Pro Glu Phe Gln Phe Gly Thr Tyr Ser
    370                 375                 380

Glu Ser Glu Arg Lys Thr Glu Glu Tyr Asp Thr Gln Ala Met Lys Tyr
385                 390                 395                 400

Leu Ser Tyr Leu Leu Tyr Pro Leu Cys Val Gly Gly Ala Val Tyr Ser
            405                 410                 415
```

```
Leu Leu Asn Ile Lys Tyr Lys Ser Trp Tyr Ser Trp Leu Ile Asn Ser
            420             425             430

Phe Val Asn Gly Val Tyr Ala Phe Gly Phe Leu Phe Met Leu Pro Gln
            435             440             445

Leu Phe Val Asn Tyr Lys Leu Lys Ser Val Ala His Leu Pro Trp Lys
        450             455             460

Ala Phe Thr Tyr Lys Ala Phe Asn Thr Phe Ile Asp Asp Val Phe Ala
465             470             475             480

Phe Ile Ile Thr Met Pro Thr Ser His Arg Leu Ala Cys Phe Arg Asp
                485             490             495

Asp Val Val Phe Leu Val Tyr Leu Tyr Gln Arg Trp Leu Tyr Pro Val
            500             505             510

Asp Lys Arg Arg Val Asn Glu Phe Gly Glu Ser Tyr Glu Glu Lys Ala
            515             520             525

Thr Arg Ala Pro His Thr Asp
        530             535


<210> 730
<211> 288
<212> PRT
<213> Homo sapiens

<400> 730
Arg Pro Ala Gly Val Thr Glu Leu Gln Pro Arg Ala Pro Gly Gly Gly
  1               5               10              15

Gly Met Glu Ala Ala Ala Glu Pro Gly Asn Leu Ala Gly Val Arg His
            20              25              30

Ile Ile Leu Val Leu Ser Gly Lys Gly Gly Val Gly Lys Ser Thr Ile
        35              40              45

Ser Thr Glu Leu Ala Leu Ala Leu Arg His Ala Gly Lys Lys Val Gly
    50              55              60

Ile Leu Asp Val Asp Leu Cys Gly Pro Ser Ile Pro Arg Met Leu Gly
65              70              75              80

Ala Gln Gly Arg Ala Val His Gln Cys Asp Arg Gly Trp Ala Pro Val
                85              90              95

Phe Leu Asp Arg Glu Gln Ser Ile Ser Leu Met Ser Val Gly Phe Leu
```

713

```
                    100              105              110
Leu Glu Lys Pro Asp Glu Ala Val Val Trp Arg Gly Pro Lys Lys Asn
        115              120              125

Ala Leu Ile Lys Gln Phe Val Ser Asp Val Ala Trp Gly Glu Leu Asp
        130              135              140

Tyr Leu Val Val Asp Thr Pro Pro Gly Thr Ser Asp Glu His Met Ala
145              150              155              160

Thr Ile Glu Ala Leu Arg Pro Tyr Gln Pro Leu Gly Ala Leu Val Val
            165              170              175

Thr Thr Pro Gln Ala Val Ser Val Gly Asp Val Arg Arg Glu Leu Thr
            180              185              190

Phe Cys Arg Lys Thr Gly Leu Arg Val Met Gly Ile Val Glu Asn Met
            195              200              205

Ser Gly Phe Thr Cys Pro His Cys Thr Glu Cys Thr Ser Val Phe Ser
        210              215              220

Arg Gly Gly Gly Glu Glu Leu Ala Gln Leu Ala Gly Val Pro Phe Leu
225              230              235              240

Gly Ser Val Pro Leu Asp Pro Ala Leu Met Arg Thr Leu Glu Glu Gly
            245              250              255

His Asp Phe Ile Gln Glu Phe Pro Gly Ser Pro Ala Phe Ala Ala Leu
            260              265              270

Thr Ser Ile Ala Gln Lys Ile Leu Asp Ala Thr Pro Ala Cys Leu Pro
            275              280              285
```

<210> 731
<211> 737
<212> PRT
<213> Homo sapiens

<400> 731
```
Asp Gln Leu Cys Gly Pro Gln Thr Tyr Lys Glu His Leu Glu Gly Gln
 1               5               10              15

Lys His Lys Lys Lys Glu Ala Ala Leu Lys Ala Ser Gln Asn Thr Ser
        20              25              30
```

714

```
Ser Ser Asn Ser Ser Thr Arg Gly Thr Gln Asn Gln Leu Arg Cys Glu
        35                  40                  45

Leu Cys Asp Val Ser Cys Thr Gly Ala Asp Ala Tyr Ala Ala His Ile
        50                  55                  60

Arg Gly Ala Lys His Gln Lys Val Val Lys Leu His Thr Lys Leu Gly
65                  70                  75                  80

Lys Pro Ile Pro Ser Thr Glu Pro Asn Val Val Ser Gln Ala Thr Ser
                85                  90                  95

Ser Thr Ala Val Ser Ala Ser Lys Pro Thr Ala Ser Pro Ser Ser Ile
            100                 105                 110

Ala Ala Asn Asn Cys Thr Val Asn Thr Ser Ser Ile Ala Thr Ser Ser
        115                 120                 125

Met Lys Gly Leu Thr Thr Thr Gly Asn Ser Ser Leu Asn Ser Thr Ser
    130                 135                 140

Asn Thr Lys Val Ser Ala Val Pro Thr Asn Met Ala Ala Lys Lys Thr
145                 150                 155                 160

Ser Thr Pro Lys Ile Asn Phe Val Gly Gly Asn Lys Leu Gln Ser Thr
                165                 170                 175

Gly Asn Lys Ala Glu Asp Thr Lys Gly Thr Glu Cys Val Lys Ser Thr
            180                 185                 190

Pro Val Thr Ser Ala Val Gln Ile Pro Glu Val Lys Gln Asp Thr Val
        195                 200                 205

Ser Glu Pro Val Thr Pro Ala Ser Leu Ala Ala Leu Gln Ser Asp Val
    210                 215                 220

Gln Pro Val Gly His Asp Tyr Val Glu Glu Val Arg Asn Asp Glu Gly
225                 230                 235                 240

Lys Val Ile Arg Phe His Cys Lys Leu Cys Glu Cys Ser Phe Asn Asp
                245                 250                 255

Pro Asn Ala Lys Glu Met His Leu Lys Gly Arg Arg His Arg Leu Gln
            260                 265                 270

Tyr Lys Lys Lys Val Asn Pro Asp Leu Gln Val Glu Val Lys Pro Ser
        275                 280                 285

Ile Arg Ala Arg Lys Ile Gln Glu Glu Lys Met Arg Lys Gln Met Gln
    290                 295                 300
```

```
Lys Glu Glu Tyr Trp Arg Arg Arg Glu Glu Glu Arg Trp Arg Met
305             310             315             320

Glu Met Arg Arg Tyr Glu Glu Asp Met Tyr Trp Arg Arg Met Glu Glu
                325             330             335

Glu Gln His His Trp Asp Asp Arg Arg Arg Met Pro Asp Gly Gly Tyr
        340             345             350

Pro His Gly Pro Pro Gly Pro Leu Gly Leu Leu Gly Val Arg Pro Gly
        355             360             365

Met Pro Pro Gln Pro Gln Gly Pro Ala Pro Leu Arg Arg Pro Asp Ser
    370             375             380

Ser Asp Asp Arg Tyr Val Met Thr Lys His Ala Thr Ile Tyr Pro Thr
385             390             395             400

Glu Glu Glu Leu Gln Ala Val Gln Lys Ile Val Ser Ile Thr Glu Arg
            405             410             415

Ala Leu Lys Leu Val Ser Asp Ser Leu Ser Glu His Glu Lys Asn Lys
        420             425             430

Asn Lys Glu Gly Asp Asp Lys Lys Glu Gly Gly Lys Asp Arg Ala Leu
        435             440             445

Lys Gly Val Leu Arg Val Gly Val Leu Ala Lys Gly Leu Leu Leu Arg
    450             455             460

Gly Asp Arg Asn Val Asn Leu Val Leu Leu Cys Ser Glu Lys Pro Ser
465             470             475             480

Lys Thr Leu Leu Ser Arg Ile Ala Glu Asn Leu Pro Lys Gln Leu Ala
            485             490             495

Val Ile Ser Pro Glu Lys Tyr Asp Ile Lys Cys Ala Val Ser Glu Ala
        500             505             510

Ala Ile Ile Leu Asn Ser Cys Val Glu Pro Lys Met Gln Val Thr Ile
        515             520             525

Thr Leu Thr Ser Pro Ile Ile Arg Glu Glu Asn Met Arg Glu Gly Asp
    530             535             540

Val Thr Ser Gly Met Val Lys Asp Pro Pro Asp Val Leu Asp Arg Gln
545             550             555             560

Lys Cys Leu Asp Ala Leu Ala Ala Leu Arg His Ala Lys Trp Phe Gln
            565             570             575
```

716

```
Ala Arg Ala Asn Gly Leu Gln Ser Cys Val Ile Ile Ile Arg Ile Leu
        580             585             590

Arg Asp Leu Cys Gln Arg Val Pro Thr Trp Ser Asp Phe Pro Ser Trp
        595             600             605

Ala Met Glu Leu Leu Val Glu Lys Ala Ile Ser Ser Ala Ser Ser Pro
    610             615             620

Gln Ser Pro Gly Asp Ala Leu Arg Arg Val Phe Glu Cys Ile Ser Ser
625             630             635             640

Gly Ile Ile Leu Lys Gly Ser Pro Gly Leu Leu Asp Pro Cys Glu Lys
            645             650             655

Asp Pro Phe Asp Thr Leu Ala Thr Met Thr Asp Gln Gln Arg Glu Asp
        660             665             670

Ile Thr Ser Ser Ala Gln Phe Ala Leu Arg Leu Leu Ala Phe Arg Gln
        675             680             685

Ile His Lys Val Leu Gly Met Asp Pro Leu Pro Gln Met Ser Gln Arg
    690             695             700

Phe Asn Ile His Asn Asn Arg Lys Arg Arg Asp Ser Asp Gly Val
705             710             715             720

Asp Gly Phe Glu Ala Glu Gly Lys Lys Asp Lys Lys Asp Tyr Asp Asn
            725             730             735

Phe
```

```
<210> 732
<211> 106
<212> PRT
<213> Homo sapiens

<400> 732
Gly Arg Gly Leu Asn Ser Pro Lys Glu Leu Arg Pro Leu Thr Arg Ala
    1               5               10              15

Ala Pro Ala Ala Ala Ala Cys Thr Gly Pro Gly Ala Ala Met Pro Lys
            20              25              30

Cys Pro Lys Cys Asn Lys Glu Val Tyr Phe Ala Glu Arg Val Thr Ser
        35              40              45
```

```
Leu Gly Lys Asp Trp His Arg Pro Cys Leu Lys Cys Glu Lys Cys Gly
    50              55              60

Lys Thr Leu Thr Ser Gly Gly His Ala Glu His Glu Gly Lys Pro Tyr
65              70              75              80

Cys Asn His Pro Cys Tyr Ala Ala Met Phe Gly Pro Lys Gly Phe Gly
                85              90                  95

Arg Gly Gly Ala Glu Ser His Thr Phe Lys
            100             105
```

<210> 733
<211> 230
<212> PRT
<213> Homo sapiens

<400> 733
```
Ala Ser Cys Leu Gln Ser Val Ala Ser Ala Cys Ala Ser Phe Pro Ala
  1           5               10                  15

Pro Ser Trp Arg Gly Thr Arg Lys Arg Asn Ala Thr Asp Arg Val Thr
            20              25              30

Gln Cys Lys Tyr Lys Arg Ile Gly Cys Pro Trp His Gly Pro Phe His
            35              40              45

Glu Leu Thr Val His Glu Ala Ala Cys Ala His Pro Thr Lys Thr Gly
    50              55              60

Ser Glu Leu Met Glu Ile Leu Asp Gly Met Asp Gln Ser His Arg Lys
65              70              75              80

Glu Met Gln Leu Tyr Asn Ser Ile Phe Ser Leu Leu Ser Phe Glu Lys
                85              90                  95

Ile Gly Tyr Thr Glu Val Gln Phe Arg Pro Tyr Arg Thr Asp Asp Phe
            100             105             110

Ile Thr Arg Leu Tyr Tyr Glu Thr Pro Arg Phe Thr Val Leu Asn Gln
            115             120             125

Thr Trp Val Leu Lys Ala Arg Val Asn Asp Ser Glu Arg Asn Pro Asn
    130             135             140

Leu Ser Cys Lys Arg Thr Leu Ser Phe Gln Leu Leu Leu Lys Ser Lys
145             150             155             160

Val Thr Ala Pro Leu Glu Cys Ser Phe Leu Leu Leu Lys Gly Pro Tyr
```

718

```
                   165                 170                 175

Asp Asp Val Arg Ile Ser Pro Val Ile Tyr His Phe Val Phe Thr Asn
            180                 185                 190

Glu Ser Asn Glu Thr Asp Tyr Val Pro Leu Pro Ile Ile Asp Ser Val
        195                 200                 205

Glu Cys Asn Lys Leu Leu Ala Ala Lys Asn Ile Asn Leu Arg Leu Phe
    210                 215                 220

Leu Phe Gln Ile Gln Lys
225                 230
```

```
<210> 734
<211> 222
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 734
Gly Arg Pro Ala Pro Pro Ala Ala Arg Ala Gly Ala His Ser Arg Gly
  1                 5                 10                 15

Ala Xaa Ala Pro Pro Ala Ala Ile Asp Met Met Phe Pro Gln Ser Arg
                20                 25                 30

His Ser Gly Ser Ser His Leu Pro Gln Gln Leu Lys Phe Thr Thr Ser
        35                 40                 45

Asp Ser Cys Asp Arg Ile Lys Asp Glu Phe Gln Leu Leu Gln Ala Gln
    50                 55                 60

Tyr His Ser Leu Lys Leu Glu Cys Asp Lys Leu Ala Ser Glu Lys Ser
65                 70                 75                 80

Glu Met Gln Arg His Tyr Val Met Tyr Tyr Glu Met Ser Tyr Gly Leu
                85                 90                 95

Asn Ile Glu Met His Lys Gln Ala Glu Ile Val Lys Arg Leu Asn Gly
            100                 105                 110

Ile Cys Ala Gln Val Leu Pro Tyr Leu Ser Gln Glu His Gln Gln Gln
        115                 120                 125
```

```
Val Leu Gly Ala Ile Glu Arg Ala Lys Gln Val Thr Ala Pro Glu Leu
    130             135             140

Asn Ser Ile Ile Arg Gln Gln Leu Gln Ala His Gln Leu Ser Gln Leu
145             150             155             160

Gln Ala Leu Ala Leu Pro Leu Thr Pro Leu Pro Val Gly Leu Gln Pro
            165             170             175

Pro Ser Leu Pro Ala Val Ser Ala Gly Thr Gly Leu Leu Ser Leu Ser
            180             185             190

Ala Leu Gly Ser Gln Ala His Leu Ser Lys Glu Asp Lys Asn Gly His
            195             200             205

Asp Gly Asp Thr His Gln Glu Asp Asp Gly Glu Lys Ser Asp
    210             215             220
```

```
<210> 735
<211> 248
<212> PRT
<213> Homo sapiens

<400> 735
Gly Thr Ser Asp Met Glu Leu Phe Leu Ala Gly Arg Arg Val Leu Val
  1           5               10              15

Thr Gly Ala Gly Lys Gly Ile Gly Arg Gly Thr Val Gln Ala Leu His
            20              25              30

Ala Thr Gly Ala Arg Val Val Ala Val Ser Arg Thr Gln Ala Asp Leu
        35              40              45

Asp Ser Leu Val Arg Glu Cys Pro Gly Ile Glu Pro Val Cys Val Asp
    50              55              60

Leu Gly Asp Trp Glu Ala Thr Glu Arg Ala Leu Gly Ser Val Gly Pro
65              70              75              80

Val Asp Leu Leu Val Asn Asn Ala Ala Val Ala Leu Leu Gln Pro Phe
            85              90              95

Leu Glu Val Thr Lys Glu Ala Phe Asp Arg Ser Phe Glu Val Asn Leu
            100             105             110

Arg Ala Val Ile Gln Val Ser Gln Ile Val Ala Arg Gly Leu Ile Ala
        115             120             125

Arg Gly Val Pro Gly Ala Ile Val Asn Val Ser Ser Gln Cys Ser Gln
```

720

```
              130                135                140

   Arg Ala Val Thr Asn His Ser Val Tyr Cys Ser Thr Lys Gly Ala Leu
   145                150                155                160

   Asp Met Leu Thr Lys Val Met Ala Leu Glu Leu Gly Pro His Lys Ile
                  165                170                175

   Arg Val Asn Ala Val Asn Pro Thr Val Val Met Thr Ser Met Gly Gln
                  180                185                190

   Ala Thr Trp Ser Asp Pro His Lys Ala Lys Thr Met Leu Asn Arg Ile
                  195                200                205

   Pro Leu Gly Lys Phe Ala Glu Val Glu His Val Val Asn Ala Ile Leu
                  210                215                220

   Phe Leu Leu Ser Asp Arg Ser Gly Met Thr Thr Gly Ser Thr Leu Pro
   225                230                235                240

   Val Glu Gly Gly Phe Trp Ala Cys
                  245
```

```
<210> 736
<211> 216
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 736
Arg Leu Leu Phe Arg Val Arg Lys Arg Met Ile Ser Phe Ser Ala Pro
  1                5                10                15

Pro Leu Met Leu Pro Phe Ser Phe Tyr Phe Phe Val Phe Pro Val Ala
                  20                25                30

Arg Thr Ala Arg Lys Arg Lys Pro Ser Pro Glu Pro Glu Gly Glu Val
                  35                40                45

Gly Pro Pro Lys Ile Asn Gly Glu Ala Gln Pro Trp Xaa Ser Thr Ser
```

721

```
                50                    55                    60

    Thr Glu Gly Xaa Lys Ile Pro Met Thr Pro Thr Ser Ser Phe Val Ser
    65                  70                  75                  80

    Pro Pro Pro Pro Thr Ala Ser Pro His Ser Asn Arg Thr Thr Pro Pro
                    85                  90                  95

    Glu Ala Ala Gln Asn Gly Gln Ser Pro Met Ala Ala Leu Ile Leu Val
                    100                 105                 110

    Ala Asp Asn Ala Gly Gly Ser His Ala Ser Lys Asp Ala Asn Gln Val
                    115                 120                 125

    His Ser Thr Thr Arg Arg Asn Ser Asn Ser Pro Pro Ser Pro Ser Ser
        130                 135                 140

    Met Asn Gln Arg Arg Leu Gly Pro Arg Glu Val Gly Gly Gln Gly Ala
    145                 150                 155                 160

    Gly Asn Thr Gly Gly Leu Glu Pro Val His Pro Ala Ser Leu Pro Asp
                    165                 170                 175

    Phe Ser Leu Ala Thr Ser Ala Pro Leu Cys Cys Thr Leu Cys His Glu
                    180                 185                 190

    Arg Leu Glu Asp Asn His Phe Val Gln Cys Arg Pro Ser Phe Asp Lys
        195                 200                 205

    Phe Ser Ser Leu Leu Arg Gln Arg
        210                 215
```

```
<210> 737
<211> 317
<212> PRT
<213> Homo sapiens

<400> 737
Arg Pro Thr Arg Pro Glu Val Met Met Thr Lys Tyr Ser Asn Leu Ser
 1               5                   10                  15

Leu Glu Ser His Asn Phe Ser Leu Thr Ala Ser Pro Leu Thr Ser Leu
                20                  25                  30

Pro Ile Pro Glu Val Met Met Thr Lys Tyr Ser Asn Leu Phe Leu Glu
        35                  40                  45

Ser His Asn Ile Ser Leu Thr Glu His Ser Ser Val Pro Val Glu Lys
    50                  55                  60
```

722

```
Asn Ile Thr Leu Glu Arg Pro Ser Ala Val Glu Leu Thr Cys Gln Phe
65              70              75                      80

Thr Thr Ser Gly Asp Val Asn Ser Val Asn Val Thr Trp Lys Lys Gly
                85              90                      95

Asp Glu Gln Leu Lys Asn Tyr His Val Ser Ala Thr Glu Gly Ile Leu
            100             105             110

Tyr Thr Gln Tyr Lys Phe Ser Ile Ile Asn Ser Glu Gln Leu Gly Ser
        115             120             125

Tyr Ser Cys Phe Phe Glu Glu Glu Lys Glu Arg Arg Gly Thr Phe Asn
    130             135             140

Phe Gly Val Pro Glu Val Gln Arg Lys Asn Lys Pro Leu Ile Thr Tyr
145             150             155             160

Val Gly Asp Ser Val Val Leu Val Cys Lys Cys Arg His Cys Ala Pro
            165             170             175

Leu Asn Trp Thr Trp Tyr Ser Gly Asn Arg Ser Val Gln Val Pro Leu
        180             185             190

Asp Val His Met Asn Glu Lys Tyr Ala Ile Asn Gly Thr Asn Ala Asn
        195             200             205

Glu Thr Arg Leu Lys Ile Met Gln Leu Ser Glu Asp Asp Lys Gly Ser
    210             215             220

Tyr Trp Cys His Ala Met Phe Gln Leu Gly Glu Ser Gln Glu Ser Val
225             230             235             240

Glu Leu Val Val Ile Ser Tyr Leu Val Pro Leu Lys Pro Phe Leu Gly
            245             250             255

Ile Val Val Glu Val Ile Leu Leu Val Ala Ile Ile Leu Phe Cys Glu
            260             265             270

Met His Thr Gln Lys Lys Lys Met His Met Asp Asp Gly Lys Glu Phe
        275             280             285

Glu Gln Val Glu Gln Leu Lys Ser Asp Asp Ser Asn Gly Ile Glu Asn
    290             295             300

Asn Ala Pro Arg His Arg Lys Asn Glu Ala Met Ser Gln
305             310             315
```

```
<210> 738
<211> 67
<212> PRT
<213> Homo sapiens

<400> 738
Ala Arg Val Ala Ser Asp Pro Phe Phe Arg His Tyr Arg Gln Leu Asn
 1               5                  10                  15


Glu Lys Leu Val Gln Leu Ile Glu Asp Tyr Ser Leu Val Ser Phe Ile
            20                  25                  30


Pro Leu Asn Ile Gln Asp Lys Glu Ser Ile Gln Arg Val Leu Gln Ala
            35                  40                  45


Val Asp Lys Ala Asn Gly Tyr Cys Phe Gly Ala Gln Glu Gln Arg Thr
        50                  55                  60


Trp Lys Pro
 65




<210> 739
<211> 142
<212> PRT
<213> Homo sapiens

<400> 739
Ser Gln Gln Pro Arg Ile Met Ser Lys Leu Gly Arg Ala Ala Arg Gly
 1               5                  10                  15


Leu Arg Lys Pro Glu Val Gly Gly Val Ile Arg Ala Ile Val Arg Ala
            20                  25                  30


Gly Leu Ala Met Pro Gly Pro Pro Leu Gly Pro Val Leu Gly Gln Arg
            35                  40                  45


Gly Val Ser Ile Asn Gln Phe Cys Lys Glu Phe Asn Glu Arg Thr Lys
        50                  55                  60


Asp Ile Lys Glu Gly Ile Pro Leu Pro Thr Lys Ile Leu Val Lys Pro
 65                  70                  75                  80


Asp Arg Thr Phe Glu Ile Lys Ile Gly Gln Pro Thr Val Ser Tyr Phe
                85                  90                  95


Leu Lys Ala Ala Ala Gly Ile Glu Lys Gly Ala Arg Gln Thr Gly Lys
            100                 105                 110


Glu Val Ala Gly Leu Val Thr Leu Lys His Val Tyr Glu Ile Ala Arg
```

724

```
                    115                120                125

     Ile Lys Ala Gln Asp Glu Ala Phe Ala Cys Arg Met Tyr Pro
        130                135                140


<210> 740
<211> 485
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 740
Trp Pro Ala Val Ala Val Arg Phe Thr Ala Leu Xaa Leu Gly Phe Gly
  1               5                 10                15

Asp Ala Val His Val Tyr Asp Gly Pro Gly Pro Glu Ser Ser Arg
            20                25                30

Leu Leu Arg Ser Leu Thr His Phe Ser Asn Gly Lys Ala Val Thr Val
         35                40                45

Glu Thr Leu Ser Gly Gln Ala Val Val Ser Tyr His Thr Val Ala Trp
      50                55                60

Ser Asn Gly Arg Gly Phe Asn Ala Thr Tyr His Val Arg Gly Tyr Cys
 65                70                75                80

Leu Pro Trp Asp Arg Pro Cys Gly Leu Gly Ser Gly Leu Gly Ala Gly
            85                90                95

Glu Gly Leu Gly Glu Arg Cys Tyr Ser Glu Ala Gln Arg Cys Asp Gly
         100               105               110

Ser Trp Asp Cys Ala Asp Gly Thr Asp Glu Glu Asp Cys Pro Gly Cys
         115               120       .       125

Pro Pro Gly His Phe Pro Cys Gly Ala Ala Gly Thr Ser Gly Ala Thr
      130                135               140

Ala Cys Tyr Leu Pro Ala Asp Arg Cys Asn Tyr Gln Thr Phe Cys Ala
145               150               155               160

Asp Gly Ala Asp Glu Arg Arg Cys Arg His Cys Gln Pro Gly Asn Phe
            165               170               175
```

725

```
Arg Cys Arg Asp Glu Lys Cys Val Tyr Glu Thr Trp Val Cys Asp Gly
        180             185             190

Gln Pro Asp Cys Ala Asp Gly Ser Asp Glu Trp Asp Cys Ser Tyr Val
        195             200             205

Leu Pro Arg Lys Val Ile Thr Ala Ala Val Ile Gly Ser Leu Val Cys
        210             215             220

Gly Leu Leu Leu Val Ile Ala Leu Gly Cys Thr Cys Lys Leu Tyr Ala
225             230             235             240

Ile Arg Thr Gln Glu Tyr Ser Ile Phe Ala Pro Leu Ser Arg Met Glu
            245             250             255

Ala Glu Ile Val Gln Gln Gln Ala Pro Pro Ser Tyr Gly Gln Leu Ile
            260             265             270

Ala Gln Gly Ala Ile Pro Pro Val Glu Asp Phe Pro Thr Glu Asn Pro
            275             280             285

Asn Asp Asn Ser Val Leu Gly Asn Leu Arg Ser Leu Leu Gln Ile Leu
        290             295             300

Arg Gln Asp Met Thr Pro Gly Gly Gly Pro Gly Ala Arg Arg Arg Gln
305             310             315             320

Arg Gly Arg Leu Met Arg Arg Leu Val Arg Arg Leu Arg Arg Trp Gly
            325             330             335

Leu Leu Pro Arg Thr Asn Thr Pro Ala Arg Ala Ser Glu Ala Arg Ser
            340             345             350

Gln Val Thr Pro Ser Ala Ala Pro Leu Glu Ala Leu Asp Gly Gly Thr
            355             360             365

Gly Pro Ala Arg Glu Gly Gly Ala Val Gly Gly Gln Asp Gly Glu Gln
        370             375             380

Ala Pro Pro Leu Pro Ile Lys Ala Pro Leu Pro Ser Ala Ser Thr Ser
385             390             395             400

Pro Ala Pro Thr Thr Val Pro Glu Ala Pro Gly Pro Leu Pro Ser Leu
            405             410             415

Pro Leu Glu Pro Ser Leu Leu Ser Gly Val Val Gln Ala Leu Arg Gly
            420             425             430

Arg Leu Leu Pro Ser Leu Gly Pro Pro Gly Pro Thr Arg Ser Pro Pro
        435             440             445
```

726

```
Gly Pro His Thr Ala Val Leu Ala Leu Glu Asp Glu Asp Asp Val Leu
    450             455             460

Leu Val Pro Leu Ala Glu Pro Gly Val Trp Val Ala Glu Ala Glu Asp
465             470             475             480

Glu Pro Leu Leu Thr
                485
```

```
<210> 741
<211> 313
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (36)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (276)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 741
Gly Gly Ala Arg Gly Xaa Xaa Arg Xaa Val Ala Ser Phe Gln Gln Gln
  1             5               10              15

His Gly Ala Gln Arg Asp Leu Lys Leu Gly Ser Arg Leu Tyr Gly Pro
            20              25              30

Ser Ser Val Xaa Phe Ala Glu Asp Phe Val Arg Ser Ser Lys Gln His
        35              40              45
```

727

```
Tyr Asn Cys Glu His Ser Lys Ile Asn Phe Arg Asp Lys Arg Ser Ala
    50                  55                  60

Leu Gln Ser Ile Asn Glu Trp Ala Ala Gln Thr Thr Asp Gly Lys Leu
    65                  70                  75                  80

Pro Glu Val Thr Lys Asp Val Glu Arg Thr Asp Gly Ala Leu Leu Val
                85                  90                  95

Asn Ala Met Phe Phe Lys Pro His Trp Asp Glu Lys Phe His His Lys
            100                 105                 110

Met Val Asp Asn Arg Gly Phe Met Val Thr Arg Ser Tyr Thr Val Gly
        115                 120                 125

Val Thr Met Met His Arg Thr Gly Leu Tyr Asn Tyr Tyr Asp Asp Glu
    130                 135                 140

Lys Glu Lys Leu Gln Met Val Glu Met Pro Leu Ala His Lys Leu Ser
145                 150                 155                 160

Ser Leu Leu Ile Leu Met Pro His His Val Glu Pro Leu Glu Arg Leu
            165                 170                 175

Glu Lys Leu Leu Thr Lys Glu Gln Leu Lys Ile Trp Met Gly Lys Met
        180                 185                 190

Gln Lys Lys Ala Val Ala Ile Ser Leu Pro Lys Gly Val Val Glu Val
        195                 200                 205

Thr His Asp Leu Gln Lys His Leu Ala Gly Leu Gly Leu Thr Glu Ala
    210                 215                 220

Ile Asp Lys Asn Lys Ala Asp Leu Ser Arg Met Ser Gly Lys Lys Asp
225                 230                 235                 240

Leu Tyr Leu Ala Ser Val Phe His Ala Thr Ala Phe Glu Trp Asp Thr
            245                 250                 255

Glu Gly Asn Pro Phe Asp Gln Asp Ile Tyr Gly Arg Glu Glu Leu Arg
            260                 265                 270

Ser Pro Lys Xaa Phe Tyr Ala Asp His Pro Phe Ile Phe Leu Val Arg
        275                 280                 285

Asp Thr Gln Thr Gly Ser Leu Leu Phe Ile Gly Arg Leu Val Arg Pro
    290                 295                 300

Lys Gly Asp Lys Met Arg Asp Glu Leu
305                 310
```

```
<210> 742
<211> 60
<212> PRT
<213> Homo sapiens

<400> 742
Arg Asn Ile Lys Trp Glu Lys Ala Tyr Lys Ala Phe Arg Ile Leu Ser
1               5                   10                  15


Val Ser Ser Phe Leu Val Phe Arg Cys Tyr Val Ile Lys His Ile Phe
            20                  25                  30


Phe Gly Phe Pro Arg Tyr Thr Ile Tyr Leu Phe Lys Gly Lys Ser Ile
        35                  40                  45


Lys Cys Ile Tyr Phe Ile Leu Trp Phe Cys Tyr Leu
    50                  55                  60



<210> 743
<211> 204
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 743
Pro Arg Gly Xaa Ser Gln Val Cys Pro Cys Ser Trp Asn Pro Gly Val
1               5                   10                  15


Pro Glu Ala Lys Ala Pro Pro Arg Gly Ser Arg Glu Asp Leu Val Ala
            20                  25                  30


Glu Glu Ser Pro Glu Leu Leu Asn Pro Glu Pro Arg Arg Leu Ser Pro
        35                  40                  45


Glu Leu Arg Leu Leu Pro Tyr Met Ile Thr Leu Gly Asp Ala Val His
    50                  55                  60


Asn Phe Ala Asp Gly Leu Ala Val Gly Ala Ala Phe Ala Ser Ser Trp
65                  70                  75                  80


Lys Thr Gly Leu Ala Thr Ser Leu Ala Val Phe Cys His Glu Leu Pro
                85                  90                  95
```

```
His Glu Leu Gly Asp Phe Ala Ala Leu Leu His Ala Gly Leu Ser Val
            100             105             110

Arg Gln Ala Leu Leu Leu Asn Leu Ala Ser Ala Leu Thr Ala Phe Ala
        115             120             125

Gly Leu Tyr Val Ala Leu Ala Val Gly Val Ser Glu Glu Ser Glu Ala
        130             135             140

Trp Ile Leu Ala Val Ala Thr Gly Leu Phe Leu Tyr Val Ala Leu Cys
145             150             155             160

Asp Met Leu Pro Ala Met Leu Lys Val Arg Asp Pro Arg Pro Trp Leu
                165             170             175

Leu Phe Leu Leu His Asn Val Gly Leu Leu Gly Gly Trp Thr Val Leu
            180             185             190

Leu Leu Leu Ser Leu Tyr Glu Asp Asp Ile Thr Phe
        195             200
```

```
<210> 744
<211> 81
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 744
Ile Thr Lys Gly Lys Xaa Val Ala Cys Ser Thr Gly Pro Glu Phe Pro
 1               5               10              15

Gly Arg Pro Thr Arg Pro Thr Thr Glu Gly Tyr Gly Cys Glu Lys Thr
            20              25              30

Thr Glu Gly Tyr Gly Cys Glu Lys Thr Thr Glu Gly Tyr Gly Cys Glu
        35              40              45

Lys Thr Thr Glu Gly Tyr Gly Cys Glu Lys Thr Thr Glu Gly Tyr Gly
    50              55              60

Cys Glu Lys Thr Thr Glu Gly Thr Ala Ala Arg Arg Arg Gln Arg Val
65              70              75              80

Arg
```

```
<210> 745
<211> 751
<212> PRT
<213> Homo sapiens

<400> 745
Leu Pro Pro Leu Gly Ser Pro Gly Pro Ala Arg Ser Ala Gly Ser Cys
 1               5                  10                  15


Ser Val Leu Phe Ser Leu Ile Leu Gln Arg Gln Asp Pro Ala Pro Ala
                20                  25                  30


Leu Ser Thr Ala Thr Met Gly Lys Gly Val Gly Arg Asp Lys Tyr Glu
            35                  40                  45


Pro Ala Ala Val Ser Glu Gln Gly Asp Lys Lys Gly Lys Lys Gly Lys
    50                  55                  60


Lys Asp Arg Asp Met Asp Glu Leu Lys Lys Glu Val Ser Met Asp Asp
65                  70                  75                  80


His Lys Leu Ser Leu Asp Glu Leu His Arg Lys Tyr Gly Thr Asp Leu
                85                  90                  95


Ser Arg Gly Leu Thr Ser Ala Arg Ala Ala Glu Ile Leu Ala Arg Asp
                100                 105                 110


Gly Pro Asn Ala Leu Thr Pro Pro Pro Thr Thr Pro Glu Trp Ile Lys
            115                 120                 125


Phe Cys Arg Gln Leu Phe Gly Gly Phe Ser Met Leu Leu Trp Ile Gly
    130                 135                 140


Ala Ile Leu Cys Phe Leu Ala Tyr Ser Ile Gln Ala Ala Thr Glu Glu
145                 150                 155                 160


Glu Pro Gln Asn Asp Asn Leu Tyr Leu Gly Val Val Leu Ser Ala Val
                165                 170                 175


Val Ile Ile Thr Gly Cys Phe Ser Tyr Tyr Gln Glu Ala Lys Ser Ser
                180                 185                 190


Lys Ile Met Glu Ser Phe Lys Asn Met Val Pro Gln Gln Ala Leu Val
            195                 200                 205


Ile Arg Asn Gly Glu Lys Met Ser Ile Asn Ala Glu Glu Val Val Val
    210                 215                 220
```

731

```
Gly Asp Leu Val Glu Val Lys Gly Gly Asp Arg Ile Pro Ala Asp Leu
225             230             235             240

Arg Ile Ile Ser Ala Asn Gly Cys Lys Val Asp Asn Ser Ser Leu Thr
            245             250             255

Gly Glu Ser Glu Pro Gln Thr Arg Ser Pro Asp Phe Thr Asn Glu Asn
            260             265             270

Pro Leu Glu Thr Arg Asn Ile Ala Phe Phe Ser Thr Asn Cys Val Glu
        275             280             285

Gly Thr Ala Arg Gly Ile Val Val Tyr Thr Gly Asp Arg Thr Val Met
        290             295             300

Gly Arg Ile Ala Thr Leu Ala Ser Gly Leu Glu Gly Gly Gln Thr Pro
305             310             315             320

Ile Ala Ala Glu Ile Glu His Phe Ile His Ile Ile Thr Gly Val Ala
            325             330             335

Val Phe Leu Gly Val Ser Phe Phe Ile Leu Ser Leu Ile Leu Glu Tyr
            340             345             350

Thr Trp Leu Glu Ala Val Ile Phe Leu Ile Gly Ile Ile Val Ala Asn
        355             360             365

Val Pro Glu Gly Leu Leu Ala Thr Val Thr Val Cys Leu Thr Leu Thr
        370             375             380

Ala Lys Arg Met Ala Arg Lys Asn Cys Leu Val Lys Asn Leu Glu Ala
385             390             395             400

Val Glu Thr Leu Gly Ser Thr Ser Thr Ile Cys Ser Asp Lys Thr Gly
            405             410             415

Thr Leu Thr Gln Asn Arg Met Thr Val Ala His Met Trp Phe Asp Asn
        420             425             430

Gln Ile His Glu Ala Asp Thr Thr Glu Asn Gln Ser Gly Val Ser Phe
        435             440             445

Asp Lys Thr Ser Ala Thr Trp Leu Ala Leu Ser Arg Ile Ala Gly Leu
    450             455             460

Cys Asn Arg Ala Val Phe Gln Ala Asn Gln Glu Asn Leu Pro Ile Leu
465             470             475             480

Lys Arg Ala Val Ala Gly Asp Ala Ser Glu Ser Ala Leu Leu Lys Cys
            485             490             495
```

732

```
Ile Glu Leu Cys Cys Gly Ser Val Lys Glu Met Arg Glu Arg Tyr Ala
        500             505             510

Lys Ile Val Glu Ile Pro Phe Asn Ser Thr Asn Lys Tyr Gln Leu Ser
        515             520             525

Ile His Lys Asn Pro Asn Thr Ser Glu Pro Gln His Leu Leu Val Met
        530             535             540

Lys Gly Ala Pro Glu Arg Ile Leu Asp Arg Cys Ser Ser Ile Leu Leu
545             550             555             560

His Gly Lys Glu Gln Pro Leu Asp Glu Glu Leu Lys Asp Ala Phe Gln
                565             570             575

Asn Ala Tyr Leu Glu Leu Gly Gly Leu Gly Glu Arg Val Leu Gly Phe
            580             585             590

Cys His Leu Phe Leu Pro Asp Glu Gln Phe Pro Glu Gly Phe Gln Phe
            595             600             605

Asp Thr Asp Asp Val Asn Phe Pro Ile Asp Asn Leu Cys Phe Val Gly
    610             615             620

Leu Ile Ser Met Ile Asp Pro Pro Arg Ala Ala Val Pro Asp Ala Val
625             630             635             640

Gly Lys Cys Arg Ser Ala Gly Ile Lys Val Ile Met Val Thr Gly Asp
            645             650             655

His Pro Ile Thr Ala Lys Ala Ile Ala Lys Gly Val Gly Ile Ile Ser
            660             665             670

Glu Gly Asn Glu Thr Val Glu Asp Ile Ala Ala Arg Leu Asn Ile Pro
        675             680             685

Val Ser Gln Val Asn Pro Arg Asp Ala Lys Ala Cys Val Val His Gly
    690             695             700

Ser Asp Leu Lys Asp Met Thr Ser Glu Gln Leu Asp Asp Ile Leu Lys
705             710             715             720

Tyr His Thr Glu Ile Val Phe Ala Lys Thr Ser Pro Gln Gln Lys Leu
            725             730             735

Ile Ile Val Glu Arg Leu Pro Lys Thr Gly Cys Tyr Arg Gly Leu
            740             745             750
```

<210> 746

733

```
<211> 25
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 746
Ile Pro Ala Leu Trp Xaa Ala Xaa Val Gly Arg Ser Leu Glu Pro Arg
 1               5                  10                  15

Ser Leu Arg Ser Ala Trp Ala Thr Trp
            20                  25



<210> 747
<211> 37
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 747
Xaa Xaa Leu Gly Gly Arg Val Cys Ser Glu Pro Arg Trp Arg His Cys
 1               5                  10                  15

Thr Pro Ala Trp Gly Thr Glu Arg Asp Ser Ile Ser Lys Lys Lys Lys
            20                  25                  30

Lys Lys Ile Lys Asn
          35



<210> 748
```

```
<211> 71
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 748
Asn Xaa Ala Leu Arg Asp Asp Val Ala Ala Gly Arg Arg Arg Leu His
 1               5                  10                  15

Ile Lys Ala Val Cys Gln Ser Val Arg Glu Ala Thr Thr Ala Ser Gly
            20                  25                  30

Gly Met Asn Ala Ala Ser Pro Arg Leu Xaa Arg His Arg Xaa Asn Gly
        35                  40                  45

Xaa Tyr Phe Thr Leu Arg Glu Arg Leu Ile Thr Met Gln Lys Gln Leu
    50                  55                  60

Gly Gly Asn Pro Glu Val Tyr
65                  70


<210> 749
<211> 109
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (90)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (102)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 749
Gly Ile Ser Arg Lys Met Lys Ser Ser Leu Pro Gln Gly Val Arg Asn
 1   5   10   15

Val Ala Xaa Val Cys Leu Gln Ile Gly Tyr Pro Thr Val Ala Ser Val
            20   25   30

Pro His Ser Ile Ile Asn Gly Tyr Xaa Arg Xaa Leu Ala Leu Ser Val
        35   40   45

Glu Thr Asp Tyr Thr Phe Pro Leu Ala Glu Xaa Val Xaa Ala Ser Trp
    50   55   60

Leu Ile His Leu Pro Xaa Trp Leu Leu Pro Xaa Trp Leu Leu Pro Pro
65   70   75   80

Gln Leu Leu Leu Leu Leu Leu Xaa Pro Xaa Leu Ser Xaa Asn Pro Arg
                85   90   95

Lys Ser Glu Asp Pro Xaa Lys Xaa Trp Ile Gly Ser Leu
            100   105

<210> 750
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 750
Gly Thr Xaa Gly Pro Ala Ser Gly Val Ala Gly Thr Met Gln Arg Xaa
 1   5   10   15

Ser Leu Pro Phe Ala Ile Leu Thr Leu Val Asn Ala Pro Tyr Lys Arg
            20   25   30

```
Gly Phe Tyr Cys Gly Asp Asp Ser Ile Arg Tyr Pro Tyr Arg Pro Asp
        35              40              45

Thr Ile Thr His Gly Leu Met Ala Gly Val Thr Ile Thr Ala Thr Val
    50              55              60

Ile Leu Val Ser Ala Gly Glu Ala Tyr Leu Val Tyr Thr Asp Arg Leu
 65              70              75              80

Tyr Ser Arg Ser Asp Phe Asn Asn Tyr Val Ala Ala Val Tyr Lys Val
            85              90              95

Leu Gly Thr Ser Cys Leu Gly Leu Pro
            100             105
```

<210> 751
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 751
Xaa Ser Arg Lys Pro Arg Xaa Xaa Val Thr Asp Tyr Ile Lys Val Tyr
 1               5                  10                  15

Tyr Thr Leu Arg Lys Gln Met Asn Xaa Asn Leu Phe Ser Ser Phe Ile
            20                  25                  30

Thr Pro Thr Ile Ile Gly Leu Pro Ile Val Ile Ile Xaa Thr Met Phe
            35                  40                  45

Pro Ser Ile Asp Xaa Pro Ile Thr Tyr Pro Xaa Xaa Gln
        50                  55                  60


<210> 752
<211> 58
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 752
Ser Asp Pro Glu Ala Glu Val Glu Glu Ser Ser Ser Gly Leu Arg Leu
 1               5                  10                  15

Ser Leu Ile Lys Met Thr Thr Ser Gln Lys His Arg Asp Phe Val Ala
            20                  25                  30

Xaa Pro Met Gly Glu Asn Gln Trp Gly Thr Trp Leu Gly Leu Val Xaa
            35                  40                  45
```

```
Ser Trp Ala Arg Asn Trp Lys Lys Gly Phe
      50                  55
```

```
<210> 753
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 753
Thr Leu His Ser Lys Gly Asn Lys Ser Trp Ser Ser Thr Ala Val Thr
 1               5                  10                  15

Ala Ala Leu Glu Leu Val Gly Gly Pro Val Pro Asn Ser Pro Tyr Ser
            20                  25                  30

Glu Ser Tyr Tyr Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Xaa
        35                  40                  45

Glu Asn Xaa Xaa Xaa Phe Arg Leu Val Cys Cys Val Glu Leu Xaa Ala
```

```
      50                    55                    60

Asp Asn Asn Ser His Arg Xaa Gln Leu
   65                    70



<210> 754
<211> 116
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (92)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (109)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 754
Met Gly Ser Asp Tyr Ile Arg Glu Val Asn Val Val Lys Ser Ala Arg
 1   5   10   15

Xaa Gly Tyr Ser Lys Met Leu Leu Gly Val Tyr Ala Tyr Phe Ile Glu

```
                  20                25                30

   His Lys Gln Arg Asn Thr Leu Ile Trp Leu Xaa Thr Asp Gly Asp Ala
           35                40                45

   Arg Glu Leu Tyr Glu Lys Pro Thr Leu Ser Pro Thr Ile Xaa Asp Ile
           50                55                60

   Pro Ser Xaa Xaa Gly Ala Gly Pro Val Val Trp Gln Lys Ser Thr Gly
       65                70                75                80

   Xaa Asn Lys Xaa Asn His Xaa Xaa Val Ser Xaa Xaa Trp Gly Gly Pro
               85                90                95

   Arg Asn Pro Ile Xaa Pro Ile Ser Xaa Trp Xaa Phe Xaa Asn Ser Xaa
               100               105               110

   Gly Pro Xaa Phe
           115
```

```
<210> 755
<211> 148
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (120)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (137)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (138)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (146)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 755
Ile Arg Gln Xaa Ile Asp Ile Arg Lys Asp Leu Tyr Ala Asn Asn Val
 1               5                  10                  15

Leu Ser Gly Gly Thr Thr Met Tyr Pro Gly Ile Ala Asp Arg Met Gln
            20                  25                  30

Lys Glu Ile Thr Ala Leu Ala Pro Ser Thr Met Lys Ile Lys Ile Ile
        35                  40                  45

Ala Pro Pro Glu Ala Gln Ile Leu Cys Leu Asp Arg Trp Leu His Pro
    50                  55                  60

Gly Leu Ser Val His Leu Pro Ala Asp Val Asp Gln Gln Thr Gly Asn
65                  70                  75                  80

Thr Val Lys Pro Gly Leu Pro Leu Ser Thr Ala Asn Ala Phe Leu Lys
                85                  90                  95

His Phe Ser Trp Phe Leu Phe Cys Leu Leu Gly Thr Gln Leu Trp Asn
            100                 105                 110

Val Pro Val Gly Ile Tyr Gly Xaa Phe Ser Phe Phe Phe Gln Ile Ile
            115                 120                 125

Pro Arg Ala Lys Val Leu Xaa Trp Xaa Xaa His Gly Val Phe Leu Asn
    130                 135                 140

Lys Xaa Trp Lys
145


<210> 756
<211> 151
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (147)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 756
Ala Glu Leu Ala Thr Thr Ser Thr Met Pro Tyr Gln Tyr Pro Ala Leu
```

```
      1              5                   10                    15

Thr Pro Glu Gln Lys Lys Glu Leu Ser Asp Ile Ala His Arg Ile Val
              20                  25                  30

Ala Pro Gly Lys Gly Ile Leu Ala Ala Asp Glu Ser Thr Gly Ser Ile
              35                  40                  45

Ala Lys Arg Leu Gln Ser Ile Gly Thr Glu Asn Thr Glu Glu Asn Arg
        50                  55                  60

Arg Phe Tyr Arg Gln Leu Leu Leu Thr Ala Asp Asp Arg Val Asn Pro
    65                  70                  75                  80

Cys Ile Gly Gly Val Ile Leu Phe His Glu Thr Leu Tyr Gln Lys Ala
                  85                  90                      95

Asp Asp Gly Arg Pro Phe Pro Gln Val Ile Lys Ser Lys Gly Gly Val
                100                 105                 110

Val Gly Ile Lys Val Asp Lys Gly Val Val Pro Leu Ala Gly Thr Asn
        115                 120                 125

Gly Glu Thr Thr Thr Gln Gly Leu Asp Gly Leu Ser Glu Arg Cys Ala
    130                 135                 140

Gln Tyr Xaa Glu Gly Arg Ser
145                 150
```

<210> 757
<211> 94
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 757
Phe Val Thr Ile Leu Ser Ile Ile Ile Thr Leu Phe Phe Ile Phe Gln
  1               5                  10                  15


Leu Lys Val Ser Xaa Tyr Ser Phe Pro Glu Asn Pro Glu Pro Lys Ser
             20                  25                  30


Leu Thr Thr Ser Lys Ser Thr Thr Pro Trp Arg Xaa Gln Met Asn Xaa
          35                  40                  45


Asn Leu Phe Ser Ser Phe Ile Thr Pro Thr Ile Ile Gly Leu Pro Ile
       50                  55                  60


Val Ile Ile Ile Thr Met Phe Pro Ser Ile Ile Phe Pro Ser Pro Thr
 65                  70                  75                  80


Arg Leu Ile Asn Asn Arg Leu Ile Ser Ile Xaa Thr Met Asp
                85                  90
```

```
<210> 758
<211> 115
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (115)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 758
Arg Xaa Ala Leu Xaa Arg Leu Thr Ile Gly Xaa Ser Trp Tyr Ala Cys
 1               5                  10                  15

Arg Tyr Arg Ser Gly Ile Pro Gly Ser Thr His Ala Ser Xaa Arg Arg
             20              25                  30

Gly Gln Leu Arg Ala Arg Gly Gly Gly Ala Xaa Pro Arg Gly Ala Met
         35              40                  45

Xaa Asp Xaa Arg Ala Gly Ser Pro Arg Xaa Gly Pro Ala Ala Arg Asp
     50              55                  60

Val Ala Ala Met Ala Ser Pro Gln Leu Cys Arg Ala Leu Val Ser Ala
 65              70                  75                  80
```

747

```
Gln Trp Val Ala Glu Ala Leu Arg Ala Pro Arg Ala Gly Ala Ala Ser
            85                  90                  95

Ala Ala Xaa Arg Thr Pro Pro Gly Xaa Leu Ala Gly Ser Trp Gly Ala
            100             105             110

Arg Thr Xaa
        115




<210> 759
<211> 44
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 759
Ile Ala Xaa Gly Arg Ser Arg Gly Ser Lys Leu Thr Trp Thr Cys Met
 1           5               10              15

Xaa Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
            20                  25              30

Val Val Leu Gln Arg Arg Asp Trp Glu Xaa Xaa Lys
        35              40




<210> 760
<211> 94
<212> PRT
```

```
<213> Homo sapiens

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (91)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 760
Asn Asp Leu Val Glu Tyr Ser Pro Val Thr Glu Lys His Leu Thr Asp
 1               5                  10                  15

Gly Met Thr Val Arg Glu Leu Cys Ser Ala Ala Ile Thr Met Ser Asp
            20                  25                  30

Asn Thr Ala Ala Asn Leu Leu Leu Thr Thr Ile Gly Gly Pro Lys Glu
        35                  40                  45

Leu Thr Ala Phe Leu His Asn Met Gly Asp His Val Thr Arg Leu Asp
    50                  55                  60

Arg Trp Glu Pro Glu Leu Asn Glu Ala Ile Pro Asn Asp Glu Arg Xaa
65                  70                  75                  80

Thr Thr Met Pro Val Ala Met Ala Thr Thr Xaa Ala Asn Tyr
                85                  90


<210> 761
<211> 38
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
```

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 761
Leu Gln Glu Ile Asn Arg Val Tyr Xaa Glu Met Tyr Lys Thr Asp Leu
  1   5   10   15

Glu Lys Asp Ile Xaa Ser Asp Xaa Ser Gly Asp Phe Arg Lys Leu Met
            20   25   30

Val Ala Leu Ala Lys Gly
         35

<210> 762
<211> 192
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 762
Cys Lys Xaa Xaa Leu Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro
  1   5   10   15

Pro Arg Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu
            20   25   30

Phe Gly Thr Ser Cys Val Gly Leu Arg Glu Ala Val Arg Ala Gly Ala
         35   40   45

Val Gly Arg Gly Ala Glu Ala Leu Ala Arg Gly Met Ala His Cys Val
      50   55   60

Thr Leu Val Gln Leu Ser Ile Ser Cys Asp His Leu Ile Asp Lys Asp
 65   70   75   80

Ile Gly Ser Lys Ser Asp Pro Leu Cys Val Leu Leu Gln Asp Val Gly
               85   90   95

Gly Gly Ser Trp Ala Glu Leu Gly Arg Thr Glu Arg Val Arg Asn Cys
              100   105   110

```
Ser Ser Pro Glu Phe Ser Lys Thr Leu Gln Leu Glu Tyr Arg Phe Glu
        115             120             125

Thr Val Gln Lys Leu Arg Phe Gly Ile Tyr Asp Ile Asp Asn Lys Thr
        130             135             140

Pro Glu Leu Arg Asp Asp Asp Phe Leu Gly Gly Ala Glu Cys Ser Leu
145             150             155             160

Gly Gln Ile Val Ser Ser Gln Val Leu Thr Leu Pro Leu Met Leu Lys
            165             170             175

Leu Glu Asn Leu Leu Gly Gly Gly Pro Ser Arg Ser Gln Leu Arg Asn
            180             185             190
```

```
<210> 763
<211> 103
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (96)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 763
Ser Phe Tyr Ser Ile Pro Glu Phe Asp Glu Trp Lys Lys His Ile Glu
  1           5             10             15

Asn Gln Lys Ala Trp Lys Ile Lys Tyr Tyr Lys Gly Leu Gly Thr Ser
            20             25             30

Thr Ala Lys Glu Ala Lys Glu Tyr Phe Ala Asp Met Glu Arg His Arg
        35             40             45

Ile Leu Phe Arg Tyr Ala Gly Pro Glu Asp Asp Ala Ala Ile Thr Leu
        50             55             60

Ala Phe Ser Lys Lys Lys Ile Asp Asp Arg Lys Glu Trp Leu Thr Asn
65             70             75             80

Phe Met Glu Asp Arg Arg Gln Arg Ser Tyr Met Ala Tyr Gln Arg Xaa
            85             90             95

Asp Ser Leu Ser Thr Gln Thr
            100
```

<210> 764
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (101)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 764
Val Phe Ser Pro Thr Gly Ser Asp Gly Pro Leu Ala Thr Ser Lys Pro
 1   5   10   15

Val Pro Ala Glu Lys Ser Gly Leu Pro Val Gly Pro Glu Asn Gly Val
            20   25   30

Glu Leu Ser Lys Glu Glu Leu Ile Arg Arg Lys Arg Glu Glu Phe Ile
         35   40   45

Gln Lys His Gly Arg Gly Met Glu Lys Ser Asn Lys Ser Thr Lys Ser
      50   55   60

Asp Ala Pro Lys Glu Lys Gly Lys Lys Ala Pro Arg Val Trp Glu Leu
 65   70   75   80

Gly Gly Cys Ala Asn Lys Glu Met Leu Asp Tyr Ser Thr Ser Thr Thr
            85   90   95

Asn Gly Thr Pro Xaa Ala Cys Leu Val
            100   105

<210> 765
<211> 147
<212> PRT
<213> Homo sapiens

<400> 765
Gly Arg Glu Thr Met Phe Arg Ala Ala Ala Pro Gly Gln Leu Arg Arg
 1   5   10   15

Ala Ala Ser Leu Leu Arg Phe Gln Ser Thr Leu Val Ile Ala Glu His
            20   25   30

Ala Asn Asp Ser Leu Ala Pro Ile Thr Leu Asn Thr Ile Thr Ala Ala
         35   40   45

752

```
Thr Arg Leu Gly Gly Glu Val Ser Cys Leu Val Ala Gly Thr Lys Cys
    50                  55              60

Asp Lys Val Ala Gln Asp Leu Cys Lys Val Ala Gly Ile Ala Lys Val
65              70              75              80

Leu Val Ala Gln His Asp Val Tyr Lys Gly Leu Leu Pro Glu Glu Leu
                85              90              95

Thr Pro Leu Ile Leu Ala Thr Gln Lys Gln Phe Asn Tyr Thr His Ile
            100             105             110

Cys Ala Gly Ala Ser Ala Phe Gly Lys Asn Leu Leu Pro Arg Val Ala
        115             120             125

Ala Lys Leu Glu Val Ala Pro Ile Ser Asp Ile Ile Ala Ile Lys Ser
    130             135             140

Pro Asp Thr
145
```

```
<210> 766
<211> 36
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 766
Gly Arg Glu Ala Glu Ala Xaa Gln Leu Glu Ser Ser Lys Arg Phe Ala
 1           5               10              15

Lys Xaa Phe Met Asp Arg His Gly Ile Pro Thr Ala Gln Trp Glu Gly
        20              25              30

Phe His Gln Thr
        35
```

```
<210> 767
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (80)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 767
Arg Phe Ala Leu Ser Thr Lys Ile Pro Asp Thr Lys Gly Cys Leu Gln
 1               5                   10                  15

Cys Arg Val Val Arg Asn Pro Tyr Thr Gly Ala Thr Phe Leu Leu Ala
            20                  25                  30

Ala Leu Pro Thr Ser Leu Leu Leu Leu Gln Trp Tyr Glu Pro Leu Gln
        35                  40                  45

Lys Phe Leu Leu Leu Lys Asn Phe Ser Ser Pro Leu Pro Xaa Pro Ala
     50                  55                  60

Gly Met Leu Xaa Pro Leu Val Leu Asp Gly Lys Glu Leu Pro Gln Xaa
65                  70                  75                  80
```

```
Phe Phe Gly Ala Glu Gly Pro Lys Gly Pro Gly Cys Arg Phe Leu Phe
             85                  90                  95

Gln Xaa Leu Xaa Leu Gly Gly Trp Xaa
            100                 105
```

<210> 768
<211> 154
<212> PRT
<213> Homo sapiens

<400> 768
```
Val Thr Leu Thr Gln Cys Ser Glu Lys Leu Val Gln Leu Ile Leu His
 1               5                  10                  15

Glu Tyr Lys Ile Phe Asn Ala Glu Val Leu Phe Arg Glu Asp Cys Ser
            20                  25                  30

Pro Asp Glu Phe Ile Asp Val Ile Val Gly Asn Arg Val Tyr Met Pro
            35                  40                  45

Cys Leu Tyr Val Tyr Asn Lys Ile Asp Gln Ile Ser Met Glu Glu Val
        50                  55                  60

Asp Arg Leu Ala Arg Lys Pro Asn Ser Val Val Ile Ser Cys Gly Met
 65                 70                  75                  80

Lys Leu Asn Leu Asp Tyr Leu Leu Glu Met Leu Trp Glu Tyr Leu Ala
                85                  90                  95

Leu Thr Cys Ile Tyr Thr Lys Lys Arg Gly Gln Arg Pro Asp Phe Thr
            100                 105                 110

Asp Ala Ile Ile Leu Arg Lys Gly Ala Ser Val Glu His Val Gly Thr
            115                 120                 125

Ser Thr Lys Tyr Ser Pro Gln Arg Val Gly Leu Thr His Thr Met Glu
        130                 135                 140

His Glu Asp Val Ile Gln Ile Val Lys Lys
145                 150
```

<210> 769
<211> 89
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 769
Asn Gln Ala Gly Leu Thr Ala Asp Arg Met Leu Val Leu Ser Arg Ala
 1               5                  10                 15

Gly Gln Ala Ala Gly Leu Thr Phe Asn Gln Thr Ser Glu Ser Leu Ser
            20                  25                 30

Ala Leu Val Lys Ala Gly Val Ser Gly Glu Ala Gln Ile Ala Ser Ile
         35                  40                 45

Ser Gln Ser Val Ala Arg Phe Xaa Ser Ala Ser Gly Val Glu Val Asp
     50                  55                 60

Lys Val Val Glu Ala Phe Glu Gly Gly Pro Tyr Pro Phe Ala Tyr Ser
 65                  70                 75                 80

Lys Arg Ile Xaa Ile Ile Ala Val Phe
                85


<210> 770
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 770
Gln Thr Ser Arg Ala Glu Ser Ala Ser Met Thr Glu Arg Arg Val Pro
 1               5                  10                 15

Phe Ser Leu Leu Arg Gly Pro Ser Trp Asp Pro Phe Arg Asp Trp Tyr
            20                  25                 30

Pro His Ser Arg Leu Phe Asp Gln Ala Phe Gly Leu Pro Arg Leu Pro
        35                  40                 45

Glu Glu Trp Ser Gln Trp Leu Gly Xaa Ser Ser Trp Pro Gly Tyr Val
    50                  55                 60

Arg Pro Leu Pro Pro Ala Ala Ser Arg Ala Pro Gln Trp Pro Xaa Pro
65                  70                 75                 80

Leu Gln Xaa Xaa Ala
                85




<210> 771
<211> 76
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 771
Asp Tyr Cys Gln Val Val Arg Pro Ser Pro Ser Gly Glu Thr Ile Thr
 1               5                  10                 15

Tyr Arg Gln Val Val Leu Ser Val Asn Val Lys Ser Pro Ala Leu Leu
```

                    20   25   30

Leu Ser Gln Leu Leu Pro Tyr Met Glu Asn Lys Lys Gly Ala Val Xaa
         35   40   45

Leu Xaa Ser Ser Ile Ala Ala Tyr Asn Pro Val Val Ala Leu Gly Val
    50   55   60

Tyr Asn Val Ser Lys Xaa Glu Leu Leu Gly Ser His
65   70   75

<210> 772
<211> 105
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 772
Gly Ala Glu Glu Gly Arg Gln Glu Ala Gln Gly Xaa Arg Lys Glu Ser
 1   5   10   15

Tyr Ser Val Tyr Val Tyr Lys Val Leu Lys Gln Val His Pro Asp Thr
             20   25   30

Gly Ile Ser Ser Lys Ala Met Gly Ile Met Asn Ser Phe Val Asn Asp
         35   40   45

Ile Phe Glu Arg Ile Ala Gly Glu Ala Ser Arg Leu Ala His Tyr Asn
    50   55   60

Lys Arg Ser Thr Ile Thr Ser Arg Glu Ile Gln Thr Ala Val Arg Leu
65   70   75   80

Leu Leu Pro Gly Glu Leu Ala Lys His Ala Val Ser Glu Gly Thr Lys
             85   90   95

Ala Val Thr Lys Tyr Thr Ser Ala Lys
            100   105

<210> 773
<211> 144
<212> PRT
<213> Homo sapiens

```
<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (132)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (139)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (140)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (141)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 773
```

Phe Ala His Leu Pro Lys Ser Thr Phe Val Leu Asp Glu Phe Lys Arg
 1   5   10   15

Lys Tyr Ser Asn Glu Asp Thr Leu Ser Val Ala Leu Pro Tyr Phe Trp
            20   25   30

Glu His Phe Asp Lys Asp Gly Trp Ser Leu Trp Tyr Ser Glu Tyr Arg
        35   40   45

Phe Pro Glu Glu Leu Thr Gln Thr Phe Met Ser Cys Asn Leu Ile Thr
    50   55   60

Gly Met Phe Gln Arg Leu Asp Lys Leu Arg Lys Asn Ala Phe Ala Ser
65   70   75   80

Val Ile Leu Phe Gly Thr Asn Asn Ser Ser Ser Ile Ser Gly Val Trp
            85   90   95

Val Xaa Pro Gly Gln Glu Leu Ala Phe Pro Leu Ser Pro Asp Trp Gln
            100   105   110

Val Asp Tyr Glu Val Ile His Met Ala Glu Thr Gly Ser Gly Lys Arg
        115   120   125

```
Gly Asp Pro Xaa Ala Gly Ser Arg Val Leu Xaa Xaa Xaa Arg Gly Pro
    130                 135                 140
```

<210> 774
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 774

```
Ile Arg His Glu Arg Glu Xaa Glu Gln Gly Val Tyr Thr Cys Thr Ala
 1               5                 10                 15

Gln Gly Ile Trp Lys Asn Glu Gln Lys Gly Glu Lys Ile Pro Arg Cys
            20                 25                 30

Leu Pro Val Cys Gly Lys Pro Val Asn Pro Val Glu Gln Arg Gln Arg
        35                 40                 45

Ile Ile Gly Gly Gln Lys Ala Xaa Gly Ile Val Gly Ala Phe Leu Gln
    50                 55                 60
```

<210> 775
<211> 69
<212> PRT
<213> Homo sapiens

<400> 775

```
Asn Ile Ser Asn Ser Gln Val Asn Arg Leu Arg His Phe Val Arg Ala
 1               5                 10                 15

Gly Leu Arg Ser Leu Phe Arg Pro Glu Pro Gln Thr Ala Val Glu Trp
```

```
                          20              25              30
  Ala Asp Ala Asn Tyr Tyr Leu Pro Lys Glu Ser Ala Tyr Gln Glu Gly
          35                      40                      45

  Arg Trp Glu Thr Leu Pro Phe Gln Arg Ala Ile Met Asn Ala Asn Gly
      50                      55                      60

  Gln Arg Leu His Pro
      65
```

<210> 776
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 776
```
Glu Arg Val Phe Xaa Pro His Gly Leu Ile Met Asp Arg Thr Xaa Arg
  1               5                  10                  15

Phe Ala Arg Asn Val Met Lys Glu Met Gly Gly His His Ile Xaa Val
            20                      25                      30

Leu Phe Leu Leu Lys Gly Gly Tyr Lys Phe Phe Ala Asp Leu Leu Asp
```

761

```
                 35                    40                    45

Tyr Ile Lys Gly Leu Xaa Xaa Lys
        50                  55



<210> 777
<211> 134
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 777
Leu Gln Phe Xaa Xaa Xaa Met Ile Thr Pro Ser Ser Asn Thr Thr His
 1               5                  10                  15

Tyr Arg Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly
            20                  25                  30

Ser Thr His Ala Ser Gly Val Phe Glu Val His Lys Lys Asn Val Arg
        35                  40                  45

Gly Glu Phe Thr Tyr Tyr Glu Ile Gln Asp Asn Thr Gly Lys Met Glu
    50                  55                  60

Val Val Val His Gly Arg Leu Thr Thr Ile Asn Cys Glu Glu Gly Asp
65                  70                  75                  80

Lys Leu Lys Leu Thr Cys Phe Glu Leu Ala Pro Lys Ser Gly Asn Thr
                85                  90                  95

Gly Glu Leu Arg Ser Val Ile His Ser His Ile Lys Val Ile Lys Thr
            100                 105                 110

Arg Lys Asn Lys Lys Asp Ile Leu Asn Pro Asp Ser Ser Met Glu Thr
        115                 120                 125
```

Ser Pro Asp Phe Phe Phe
    130

<210> 778
<211> 133
<212> PRT
<213> Homo sapiens

<400> 778
Thr Ile Thr Ser Gly Gly Asn Pro Pro Ala Phe Ser Leu Thr Pro Asp
  1   5   10   15

Gly Lys Leu Thr Ala Lys Asn Ala Asp Ile Ser Gly Ser Val Asn Ala
              20   25   30

Asn Ser Gly Thr Leu Ser Asn Val Thr Ile Ala Glu Asn Cys Thr Ile
          35   40   45

Asn Gly Thr Leu Arg Ala Glu Lys Ile Val Gly Asp Ile Val Lys Ala
      50   55   60

Ala Ser Ala Ala Phe Pro Arg Gln Val Glu Ser Ser Val Asp Trp Pro
  65   70   75   80

Ser Gly Thr Arg Thr Val Thr Val Thr Asp Asp His Pro Phe Asp Arg
              85   90   95

Gln Ile Val Val Leu Pro Leu Thr Phe Arg Gly Ser Lys Arg Thr Val
              100   105   110

Ser Gly Arg Thr Thr Tyr Ser Met Cys Tyr Leu Lys Val Leu Met Asn
          115   120   125

Gly Ala Val Ile Tyr
    130

<210> 779
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

763

```
<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 779
Pro Asn Thr Ala Leu Val Gly Val Gln Val Asp Ser Glu Gln Phe Gly
 1               5               10                  15


Ser Gln Gln Val Ser Arg Asn Tyr His Leu Arg Gly Arg Ile Leu Gln
            20              25              30


Val Pro Ser Asn Tyr Asn Pro Gln Thr Arg Gln Tyr Ser Gly Ile Trp
         35              40              45


Asp Gly Thr Xaa Lys Pro Ala Tyr Ser Asn Asn Met Ala Trp Xaa Leu
      50              55              60


Trp Asp Met Leu Thr His Pro Arg Tyr Gly Met Gly Lys Arg Leu Gly
 65              70              75              80


Ala Ala Asp Val Asp Lys Trp Ala Leu Tyr
               85              90
```


```
<210> 780
<211> 82
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 780
Val Xaa Arg Ala Ser Asp Asp Ala Glu Gly Tyr Leu Asp Xaa Phe Lys
 1               5                   10                  15

Gly Lys Ile Thr Glu Ser His Leu Xaa Lys Glu Leu Leu Glu Lys Val
            20                  25                  30

Glu Leu Thr Glu Asp Asn Ala Ser Arg Leu Glu Glu Phe Ser Lys Xaa
         35                  40                  45

Trp Lys Asp Ala Ser Xaa Lys Trp Asn Ala Met Trp Ala Xaa Lys Ile
     50                  55                  60

Xaa Gln Thr Lys Asp Xaa Lys Arg Xaa Leu Phe Cys Tyr Leu Val Val
 65                  70                  75                  80

Arg Ser


<210> 781
<211> 49
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 781
Pro Asp Phe His Arg Glu Asp Asp Trp Trp Arg Asn Gly Gln Asn Leu
  1               5                  10                  15


Tyr Leu Asp Asn Leu Glu Ala Thr Gly Leu Tyr Gln Val Pro Leu Ser
             20                  25                  30


Ala Ala Gln Pro Gly Asp Val Leu Leu Cys Xaa Phe Gly Ser Ser Xaa
          35                  40                  45


Xaa
```

```
<210> 782
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 782
Xaa Lys Glu Asn Gly Thr Val Thr Ala Ala Asn Ala Ser Thr Leu Asn
  1               5                  10                  15


Asp Gly Ala Ala Ala Leu Val Leu Met Thr Ala Asp Ala Ala Xaa Arg
             20                  25                  30
```

```
Leu Asn Val Thr Pro Leu Ala Arg Ile Val Ala Phe Ala Asp Ala Ala
         35              40              45

Val Glu Pro Ile Asp Phe Pro Ile Ala Pro Val Tyr Ala Ala Ser Met
     50              55              60

Val Leu Lys Asp Val Gly Leu Lys Lys Glu Asp Ile Ala Met Trp Glu
 65              70              75              80

Val Asn Gly Ser Leu
                85
```

```
<210> 783
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (30)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

```
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (63)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 783
Gly Lys Ser Pro Ala Ser Trp Trp Gly Ser Ala Gly His Xaa Xaa Xaa
 1           5                   10                  15

Pro Cys Arg Gly Ala Cys Ala Ala Ala Gly Xaa Thr Ala Xaa Arg Gly
            20                  25                  30

Phe Ala Val Ser Ala Arg Xaa Val Trp Gln Thr Xaa Asp Arg Pro Gly
        35                  40                  45

Thr Trp Asp Gln Ser Arg Asn Leu Leu Leu Asn Gly Lys Ser Xaa Pro
    50              55                  60

Thr Lys Val Arg Leu Ile Trp Gly Gly Ser Leu Pro Pro Val Lys Arg
 65              70                  75                  80

Xaa Ala Asp Glu Leu Asp Xaa Arg Pro Gly
                85                  90




<210> 784
<211> 84
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

```
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (70)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 784
Ala Leu Leu Gly Leu Thr Ile Xaa Lys Ala Gly Thr Pro Ala Gly Thr
 1               5                  10                  15

Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Leu Leu Cys Leu Glu
                20                  25                  30

Gly Ile Ile Leu Ser Leu Phe Val Ile Ile Thr Ile Thr Ile Leu Ile
                35                  40                  45

Asn His Leu Thr Leu Ala Ser Ile Thr Pro Ile Ile Leu Leu Val Xaa
        50                  55                  60

Ala Ala Cys Glu Ala Xaa Leu Gly Leu Ile Pro Phe Ser Tyr Xaa Leu
 65                 70                  75                  80

Xaa Tyr Ile Arg


<210> 785
<211> 61
<212> PRT
<213> Homo sapiens

<400> 785
Ile Gly Phe Asp Asn Lys Lys Asp Leu Leu Ile Ser Val Gly Asp Leu
 1               5                  10                  15

Val Asp Arg Gly Ala Glu Asn Val Glu Cys Leu Glu Leu Ile Thr Phe
                20                  25                  30
```

```
Pro Trp Phe Arg Ala Val Arg Gly Asn His Glu Gln Met Met Ile Asp
        35                  40                  45

Gly Leu Ser Glu Arg Gly Asn Val Asn His Trp Leu Leu
        50                  55                  60


<210> 786
<211> 102
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (8)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (86)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 786
Gly Leu Gln Pro Tyr Cys Tyr Xaa Thr Trp Arg Cys Arg Cys Thr Thr
 1               5                  10                  15

Gly Gln Pro Gly Thr Ala Pro Ala Gly Thr Pro Gly Ala Pro Pro Leu
        20                  25                  30
```

```
Xaa Gly Met Ala Ile Val Lys Glu Glu Glu Thr Glu Ala Ala Ile Gly
         35                  40                  45

Ala Pro Pro Thr Ala Thr Glu Gly Pro Glu Thr Lys Pro Val Leu Xaa
         50                  55                  60

Ala Leu Glu Glu Gly Pro Gly Ala Glu Gly Ser Arg Leu Asp Ser Leu
 65                  70                  75                  80

Val Ala Xaa Xaa Leu Xaa Leu Glu Val Val Ala Leu Arg Asp Ser Ala
                 85                  90                  95

Pro Val Leu Ala Gly Thr
            100
```

```
<210> 787
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (44)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 787
```
```
Cys Leu Xaa Arg Ala Arg Xaa Pro Ala Ala Ala Asn Ser Ser Gly Asp
 1               5                  10                  15

Gly Gly Ala Ala Gly Asp Gly Thr Val Val Asp Cys Pro Val Cys Lys
            20                  25                  30

Gln Gln Cys Phe Ser Lys Asp Ile Val Glu Asn Xaa Phe Met Arg Xaa
         35                  40                  45
```

```
Ser Gly Ser Lys Ala Ala Thr Asp Ala Gln Asp Ala Asn Gln Cys Cys
     50                  55                  60
```

```
<210> 788
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 788
Thr Leu Ala Phe Phe Leu Ile Pro Cys Ile Gly Ser Pro Ala Cys Pro
 1               5                  10                  15

Thr Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Thr Thr Lys
            20                  25                  30

Asp Leu Lys Glu Lys Lys Glu Val Leu Glu Arg Gly Arg Lys Trp Lys
        35                  40                  45

Arg Arg Pro Xaa Leu Thr Gly Asn Ala Asn Leu Gly Lys
     50                  55                  60
```

```
<210> 789
<211> 69
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 789
Ala Gln Asp Asn Phe Lys His Leu Asn Gly Ile Xaa Leu Phe His Cys
 1               5                  10                  15

Ile Asp Pro Asn Gly Ser Lys His Lys Arg Thr Asp Arg Ser Ile Leu
            20                  25                  30
```

```
Cys Cys Leu Arg Lys Gly Glu Ser Gly Gln Ser Trp Gln Gly Leu Thr
         35                  40                  45

Lys Glu Arg Ala Lys Leu Asn Trp Leu Ser Val Asp Phe Asn Asn Trp
     50                  55                  60

Glu Arg Leu Gly Arg
 65
```

<210> 790
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 790
```
Gln Ser Thr Val Lys Leu Glu His Ala Lys Ser Val Ala Ser Arg Ala
 1               5                  10                  15

Thr Val Leu Gln Lys Xaa Ser Xaa Thr Pro Val Gly Met Phe Leu Lys
             20                  25                  30

Leu Asn Xaa Met Asn Val Lys Phe Xaa Ser Gly Tyr Tyr Glu Leu Pro
         35                  40                  45

Cys Arg Ser
     50
```

773

```
<210> 791
<211> 154
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 791
Asp Pro Gln Ala His Val Ala Met Leu Ser Ser Thr Ala Met Tyr Ser
 1               5                  10                  15

Ala Pro Gly Arg Asp Leu Gly Met Glu Pro His Arg Ala Ala Gly Pro
            20                  25                  30

Leu Gln Leu Arg Phe Ser Pro Tyr Val Phe Asn Gly Gly Thr Ile Leu
        35                  40                  45

Ala Ile Ala Gly Glu Asp Phe Ala Ile Val Ala Ser Asp Thr Arg Leu
     50                  55                  60

Ser Glu Gly Phe Ser Ile His Thr Arg Asp Ser Pro Lys Xaa Tyr Lys
65                   70                  75                  80

Leu Thr Asp Lys Thr Val Ile Gly Cys Ser Gly Phe His Gly Asp Cys
                85                  90                  95

Leu Thr Leu Thr Lys Ile Ile Glu Ala Arg Leu Lys Met Tyr Lys His
            100                 105                 110

Ser Asn Asn Lys Ala Met Thr Thr Gly Ala Ile Ala Ala Met Leu Ser
            115                 120                 125

Thr Ile Leu Tyr Ser Arg Arg Phe Phe Pro Tyr Tyr Val Tyr Asn Ile
            130                 135                 140

Ile Gly Gly Leu Asp Glu Glu Gly Lys Gly
145                 150


<210> 792
<211> 96
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (72)
```

774

```
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (73)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (74)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 792
Gly Thr Ala Ser Thr Ala Met Tyr Ser Ala Pro Gly Arg Asp Leu Gly
 1               5                  10                  15

Met Glu Pro His Arg Ala Ala Gly Pro Leu Gln Leu Arg Phe Ser Pro
            20                  25                  30

Tyr Val Phe Asn Gly Gly Thr Ile Leu Ala Ile Ala Gly Glu Asp Phe
            35                  40                  45

Ala Ile Val Ala Ser Asp Thr Arg Leu Ser Glu Gly Phe Ser Ile His
    50                  55                  60

Thr Arg Asp Ser Pro Lys Cys Xaa Xaa Xaa Asn Arg Gln Asn Ser His
65                  70                  75                  80

Trp Met Gln Arg Phe Ser Trp Arg Leu Ser Tyr Ala Asp Lys Asp Tyr
                85                  90                  95
```

```
<210> 793
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 793
Arg Pro Pro Val Arg Xaa Phe Leu Arg Asp Phe Phe Met Ser Met Tyr
 1               5                  10                  15

Thr Thr Ala Gln Leu Leu Ala Ala Asn Glu Gln Lys Phe Lys Phe Asp
```

```
                        20                    25                    30

        Pro Leu Phe Leu Arg Leu Phe Phe Arg Glu Ser Tyr Pro Phe Thr Thr
                 35                    40                    45

        Glu Glu Ser Leu Ser Leu Thr Asn Ser Gly Thr Gly Lys His Gly Ala
                 50                    55                    60

        Val Arg Phe Ala Asp Cys Phe Arg
        65                    70



<210> 794
<211> 124
<212> PRT
<213> Homo sapiens

<400> 794
Gly Ser Gly Asp His Glu Gly Gly Lys Gly Asp Gly Met Glu Glu Val
 1               5                  10                  15

Pro His Asp Cys Pro Gly Ala Asp Ser Ala Gln Ala Gly Arg Gly Ala
                20                  25                  30

Ser Cys Gln Gly Cys Pro Asn Gln Arg Leu Cys Ala Ser Gly Ala Gly
           35                  40                  45

Ala Thr Pro Asp Thr Ala Ile Glu Glu Ile Lys Glu Lys Met Lys Thr
           50                  55                  60

Val Lys His Lys Ile Leu Val Leu Ser Gly Lys Gly Gly Val Gly Lys
65                  70                  75                  80

Ser Thr Phe Ser Ala His Leu Ala His Gly Leu Ala Glu Asp Glu Asn
                85                  90                  95

Thr Gln Ile Ala Leu Leu Asp Ile Asp Ile Cys Gly Pro Ser Ile Pro
                100                 105                 110

Lys Ile Met Gly Leu Glu Gly Glu Gln Val His Gln
           115                 120



<210> 795
<211> 144
<212> PRT
<213> Homo sapiens

<220>
```

```
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (33)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

```
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (76)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (78)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (88)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (100)
```

```
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (107)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (112)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (117)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (123)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 795
Ala Arg Xaa Trp Leu Xaa Gly Val Thr Phe Xaa Val Thr Thr Val Xaa
  1           5               10              15

Thr Lys Xaa Arg Thr Glu Xaa Val Gln Lys Leu Cys Pro Gly Gly Gln
          20              25              30

Xaa Pro Phe Leu Leu Tyr Xaa Thr Glu Val His Thr Asp Thr Asn Lys
      35              40              45

Xaa Ala Glu Phe Leu Xaa Ala Val Leu Cys Pro Pro Arg Tyr Pro Xaa
    50              55              60

Leu Ala Ala Leu Asn Pro Xaa Ser Asn Thr Ala Xaa Leu Xaa Ile Phe
```

```
             65                    70                    75                    80

Xaa Lys Xaa Ser Ala Tyr Xaa Xaa Xaa Ser Asn Pro Xaa Leu Asn Asp
                    85                    90                    95

Asn Leu Glu Xaa Gly Leu Leu Lys Ala Leu Xaa Val Leu Xaa Asn Xaa
                   100                   105                   110

Leu Thr Ser Pro Xaa Ser Glu Glu Val Asp Xaa Thr Ser Ala Xaa Val
               115                   120                   125

Lys Val Ser Leu Arg Arg Ser Xaa Trp Ile Ala Arg Ala His Pro Gly
           130                   135                   140
```

```
<210> 796
<211> 97
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 796
Ile Met Lys Asn Gly Phe Tyr Ala Thr Tyr Arg Ser Lys Asn Lys Gly
  1               5                    10                    15

Lys Asp Lys Arg Ser Ile Asn Leu Ser Val Phe Leu Asn Ser Xaa Leu
               20                    25                    30

Ala Asp Asn His His Leu Gln Val Gly Ser Asn Tyr Leu Tyr Ile His
            35                    40                    45

Lys Ile Asp Gly Lys Thr Phe Leu Phe Thr Lys Thr Asn Asp Lys Ser
        50                    55                    60

Leu Val Gln Lys Ile Asn Arg Ser Lys Ala Ser Val Glu Asp Ile Lys
65                    70                    75                    80

Asn Ser Leu Val Asp Asp Gly Ile Ile Gly Ile Pro Ile Phe Phe Val
                   85                    90                    95

Cys
```

```
<210> 797
<211> 181
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 797
Arg Xaa Xaa Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro Pro Arg
 1               5                   10                  15

Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly
            20                  25                  30

Thr Arg Pro Ser Arg Leu Arg Lys Thr Arg Lys Leu Arg Gly His Val
        35                  40                  45

Ser His Gly His Gly Arg Ile Gly Lys His Arg Lys His Pro Gly Gly
    50                  55                  60

Arg Gly Asn Ala Gly Gly Leu His His His Arg Ile Asn Phe Asp Lys
65                  70                  75                  80

Tyr His Pro Gly Tyr Phe Gly Lys Val Gly Met Lys His Tyr His Leu
            85                  90                  95

Lys Arg Asn Gln Ser Phe Cys Pro Thr Val Asn Leu Asp Lys Leu Trp
            100                 105                 110

Thr Leu Val Ser Glu Gln Thr Arg Val Asn Ala Ala Lys Asn Lys Thr
        115                 120                 125

Gly Ala Ala Pro Ile Ile Asp Val Val Arg Ser Gly Tyr Tyr Lys Val
    130                 135                 140

Leu Gly Lys Gly Lys Leu Pro Lys Gln Pro Val Ile Val Lys Ala Lys
145                 150                 155                 160

Phe Phe Ser Arg Arg Ala Glu Glu Lys Ile Lys Ser Val Gly Gly Ala
            165                 170                 175
```

```
Cys Val Leu Val Ala
          180


<210> 798
<211> 136
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (29)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 798
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Arg Lys Glu Gly Trp
  1               5                  10                  15

Arg Glu Glu Lys Gly Pro Phe Cys His Gln Arg Arg Xaa Thr Arg Glu
             20                  25                  30

Tyr Thr Ile Asn Ile His Lys Arg Ile His Gly Val Gly Phe Lys Lys
          35                  40                  45

Arg Ala Pro Arg Ala Leu Lys Glu Ile Arg Lys Phe Ala Met Lys Glu
       50                  55                  60

Met Gly Thr Pro Asp Val Arg Ile Asp Thr Arg Leu Asn Lys Ala Val
65                  70                  75                  80

Trp Ala Lys Gly Ile Arg Asn Val Pro Tyr Arg Ile Arg Val Arg Leu
                85                  90                  95

Ser Arg Lys Arg Asn Glu Asp Glu Asp Ser Pro Asn Lys Leu Tyr Thr
             100                 105                 110

Leu Val Thr Tyr Val Pro Val Thr Thr Phe Lys Ile Ser Val Leu Asn
          115                 120                 125

Ser Val Thr Val Ala Lys Ser Pro
       130                 135


<210> 799
<211> 142
<212> PRT
<213> Homo sapiens

<400> 799
```

```
Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Ala Ala Leu Ala Ala
 1               5               10               15

Cys Ala Ala Met Ala Lys Ile Lys Ala Arg Asp Leu Arg Gly Lys Lys
             20               25               30

Lys Glu Glu Leu Leu Lys Gln Leu Asp Asp Leu Lys Val Glu Leu Ser
         35               40               45

Gln Leu Arg Val Ala Lys Val Thr Gly Gly Ala Ala Ser Lys Leu Ser
     50               55               60

Lys Ile Arg Val Val Arg Lys Ser Ile Ala Arg Val Leu Thr Val Ile
 65               70               75               80

Asn Gln Thr Gln Lys Glu Asn Leu Arg Lys Phe Tyr Lys Gly Lys Lys
             85               90               95

Tyr Lys Pro Leu Asp Leu Arg Pro Lys Lys Thr Arg Ala Met Arg Arg
             100              105              110

Arg Leu Asn Lys His Glu Glu Asn Leu Lys Thr Lys Lys Gln Gln Arg
         115              120              125

Lys Glu Arg Leu Tyr Pro Leu Arg Lys Tyr Ala Val Lys Ala
     130              135              140
```

<210> 800
<211> 74
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (14)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

```
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (58)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (59)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (60)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (62)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (64)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 800
Xaa Xaa Tyr His Lys Tyr Lys Ala Lys Arg Asn Cys Trp Xaa Xaa Val
 1               5                   10                  15

Arg Gly Val Xaa Met Asn Pro Val Glu His Pro Phe Gly Gly Gly Asn
            20                  25                  30

His Gln His Ile Gly Lys Pro Ser Thr Ile Arg Arg Asp Ala Pro Ala
        35                  40                  45

Gly Arg Lys Val Gly Leu Ile Ala Ala Xaa Xaa Xaa Gly Xaa Leu Xaa
    50                  55                  60
```

```
Gly Thr Lys Xaa Val Gln Glu Lys Glu Asn
 65                  70
```

```
<210> 801
<211> 100
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 801
Met Thr Pro Val Gln Arg Gly Gly Pro Gly Ala Xaa Val Ala Leu Gly
 1              5                  10                  15

Trp Gly Thr Ala Val Ala Ser Ala Arg Phe Arg Gln Trp His Pro Gly
            20                  25                  30

Pro Gly Ser Arg Pro Trp Thr Gly Pro Gly Pro Arg Pro Arg Thr Arg
        35                  40                  45

Xaa Gly Lys Ala Glu Asp Lys Glu Trp Met Pro Val Thr Lys Leu Gly
    50                  55                  60

Arg Leu Val Lys Asp Met Lys Ile Lys Ser Leu Glu Glu Ile Tyr Leu
 65                  70                  75                  80

Phe Ser Leu Pro Ile Lys Glu Ser Glu Ile Ile Asp Ser Ser Trp Gly
                85                  90                  95

Leu Ser Gln Gly
            100
```

```
<210> 802
<211> 19
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
```

```
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 802
Xaa Glu Thr Gln Ala Ile Val Cys Gln Gln Leu Asp Leu Thr His Leu
  1               5                  10                  15

Lys Gly Ala



<210> 803
<211> 54
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 803
Gly Thr Arg Asp Val Arg Arg Val Pro Gly Val Ala Pro Thr Leu Val
  1               5                  10                  15

Arg Ser Ala Ser Glu Thr Ser Glu Lys Arg Pro Phe Met Cys Ala Tyr
               20                  25                  30

Pro Gly Cys Asn Lys Arg Tyr Phe Lys Leu Ser His Leu Gln Met His
          35                  40                  45

Ser Arg Xaa Ala His Trp
       50



<210> 804
<211> 140
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (104)
<223> Xaa equals any of the naturally occurring L-amino acids
```

```
<220>
<221> SITE
<222> (120)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (135)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 804
Phe Lys Ser Tyr Leu Gly Asp Thr Ile Glu Gly Ser Leu Gln Val Thr
 1               5                  10                  15

Gly Pro Glu Ile Pro Gly Ser Thr His Ala Ser Ala Glu Ser Leu Ser
            20                  25                  30

Arg Arg Lys Leu Asp Thr Gly Thr Gly Ser Ala Met Arg Leu Leu Pro
        35                  40                  45

Arg Leu Leu Leu Leu Leu Leu Leu Val Phe Pro Ala Thr Val Leu Phe
    50                  55                  60

Arg Gly Gly Pro Arg Gly Leu Leu Ala Val Ala Gln Asp Leu Thr Glu
65                  70                  75                  80

Asp Glu Glu Thr Val Glu Asp Ser Ile Ile Glu Asp Glu Asp Asp Glu
                85                  90                  95

Ala Xaa Val Glu Glu Asp Glu Xaa Thr Asp Phe Val Glu Asp Lys Glu
            100                 105                 110

Glu Glu Asp Val Ser Gly Glu Xaa Glu Thr Leu Pro Ser Ala Asp Thr
            115                 120                 125

Thr Ile Leu Phe Leu Lys Xaa Xaa Ile Phe Arg Gln
            130                 135                 140

<210> 805
<211> 130
<212> PRT
<213> Homo sapiens
```

```
<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (119)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (120)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (124)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (125)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 805
Phe Glu Ala Asn Arg Gln Arg Ala Thr Met Ala Val Ala Arg Ala Ala
 1               5                  10                 15

Leu Gly Pro Leu Val Thr Gly Leu Tyr Asp Val Gln Ala Phe Lys Phe
            20                  25                 30

Gly Asp Phe Val Leu Lys Ser Gly Leu Ser Ser Pro Ile Tyr Ile Asp
            35                  40                 45

Leu Arg Gly Ile Val Ser Arg Pro Arg Leu Leu Ser Gln Val Ala Asp
    50                  55                 60

Ile Leu Phe Gln Thr Ala Gln Asn Ala Gly Ile Ser Phe Asp Thr Val
65                  70                 75                 80

Cys Gly Val Pro Tyr Thr Ala Leu Pro Leu Ala Thr Val Ile Cys Ser
                85                  90                 95

Thr Asn Gln Ile Pro Met Leu Ile Xaa Arg Lys Glu Thr Lys Asp Tyr
                100                 105                110

Gly Thr Lys Arg Leu Val Xaa Xaa Ile Leu Ile Xaa Xaa Lys Leu Phe
            115                 120                 125

Asn His
```

130

```
<210> 806
<211> 35
<212> PRT
<213> Homo sapiens

<400> 806
Val Ala Asp Ile Ala Trp Trp Phe Arg Arg Arg Ile Phe Ile Ala Val
 1               5               10              15

Leu Arg Cys Asn Ser Ser Ile Ser Asp Ala Glu Ser Met Met Ser Ala
            20              25              30

Ile Phe His
        35
```

```
<210> 807
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (42)
<223> Xaa equals any of the naturally occurring L-amino acids
```

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (61)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (65)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (67)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 807
Asp Trp Arg Gln Thr Ser Xaa Ser Gly Ala His Gly Arg Leu Lys Pro
 1   5   10   15

Trp Xaa Asn Pro Xaa Ala Arg Arg Asp Ala Arg Glu Asp Arg Ala Thr
            20   25   30

Trp Lys Ser Asn Tyr Xaa Leu Lys Ile Xaa Gln Arg Ile Gly Met Ile
        35   40   45

Ile Leu Lys Trp Val Xaa Leu Val Gly Ser Glu Tyr Xaa Met Val Gly
    50   55   60

Xaa Pro Xaa Xaa Ser Met Ala Ser
65   70

<210> 808
<211> 53
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (30)

790

```
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 808
Pro Ser Leu Lys Gly Thr Lys Ala Gly Asn Asp Leu Val Ser Leu Arg
 1               5                  10                  15

Ala Ala Arg Thr Leu Arg Pro Pro Gly Thr Lys Pro Gly Xaa Gly Ala
            20                  25                  30

Thr Phe Gly Pro Gly Leu Ser Glu Arg Ala Ser Ala Gln Arg Gly Ser
        35                  40                  45

Gly Gln Leu Xaa His
        50



<210> 809
<211> 70
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (35)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids
```

791

```
<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (53)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 809
Ala Xaa Glu Tyr Thr Leu Arg Thr Ser Gly Leu Thr Val Arg Pro Xaa
 1               5                  10                  15


Thr Ser Gly Pro Gly Cys Xaa Cys Gln Gly Gly Leu Ser Asp Leu Arg
            20                  25                  30


Met Gly Xaa Met Glu Trp Xaa Arg Arg Asp Ala Gly Val Xaa Ala Gly
        35                  40                  45


Xaa Asp Arg Ser Xaa Thr His Glu Cys Gln Val Gln Val Val Arg Val
    50                  55                  60


Gly Asp Met Ser Leu Glu
65                  70




<210> 810
<211> 39
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

```
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (18)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 810
Xaa Ile Xaa Xaa Cys Gly Phe Glu Pro Pro His Phe Leu Thr Leu Asn
 1               5                  10                  15

Leu Xaa Met His Arg Xaa Ser Cys Pro Leu Asp Cys Lys Val Tyr Val
            20                  25                  30 .

Gly Ile Leu Gly Thr Met Xaa
          35



<210> 811
<211> 27
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (25)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 811
```

793

```
Gly Arg Glu Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 1           5              10                  15

Lys Lys Lys Lys Lys Xaa Pro Xaa Xaa Gly Pro
            20              25
```

<210> 812
<211> 72
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 812
```
Arg Arg Arg Xaa Arg Pro Ala Pro Pro Pro Gly Ala Cys Leu His Leu
 1           5              10                  15

Arg Leu Pro Lys Xaa Leu Gly Gln Arg Leu Asp Ala Arg His Gln Gly
            20              25                  30

Pro Val Glu Val Leu Gln Glu Glu Arg Arg Pro Arg Pro Arg Leu Pro
         35              40                  45

Arg Pro Ala Leu Ala Thr Leu Ser Ala Arg Phe Thr Asn Lys Leu Ser
    50              55                  60

Asp Pro Lys Lys Lys Lys Lys Lys
65              70
```

<210> 813
<211> 27
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

```
<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 813
Asn Ser Ala Xaa Xaa Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 1               5                  10                  15

Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
            20                  25



<210> 814
<211> 23
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 814
Asn Ser Ala Gln Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 1               5                  10                  15

Lys Lys Lys Lys Lys Lys Xaa
            20



<210> 815
<211> 46
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (16)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (24)
```

```
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (37)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 815
Phe Asp Gln Arg Thr Arg Ile Thr Arg Pro Gln Arg Arg Val Phe Xaa
 1               5                  10                  15


Ala Ser Xaa Ser Pro Pro Lys Xaa Ile Thr Asn Cys Ile Tyr Xaa Lys
            20                  25                  30


Ile Asn Arg Tyr Xaa Xaa Leu Asn Ile Ala Ile Gln Ile Xaa
        35                  40                  45



<210> 816
<211> 52
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (22)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
```

```
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (45)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 816
Asn Ser Ala Xaa Leu Lys Gln Thr Gly Leu Lys Gly Val Thr Phe Asn
 1               5               10              15

Lys Arg Met Lys Met Xaa Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
            20              25              30

Lys Lys Lys Lys Lys Lys Lys Lys Xaa Pro Gly Gly Xaa Pro Pro Pro
        35              40              45

Pro Xaa Pro Pro
    50



<210> 817
<211> 113
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (68)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (69)
```

797

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (100)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (110)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 817
Xaa Ser Gly Arg Gly Gly Ser His Ser Arg Asn Leu Val Leu Phe Phe
 1   5   10   15

Pro Gln Leu Gly Lys Arg His Met Ser Leu Ala Xaa Pro Ile Ala Asn
            20   25   30

Pro Val Val Gly Phe Leu Ala Tyr Ser Arg Pro Ser Val Leu Pro Gly
            35   40   45

Trp His Arg Pro His Arg Thr Ser Arg Val Gly Leu Ser Gly Ser Ser
    50   55   60

Thr Ala Gly Xaa Xaa Asn Ser Arg Phe Gly Gly Cys Ser Phe Gln Ala
65   70   75   80

Gly Asp Thr Leu Gly Pro Val Val Arg Ser Pro Val Leu Arg His Leu
                85   90   95

Val Trp Asn Xaa Arg Leu Ala Val Ser Ile Gly Val Gly Xaa Cys Ala
            100   105   110

Ala

<210> 818
<211> 132
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE

<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (15)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (39)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (71)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)

```
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (77)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (81)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (82)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (93)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (94)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (97)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (105)
<223> Xaa equals any of the naturally occurring L-amino acids
```

800

```
<220>
<221> SITE
<222> (108)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (121)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (127)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 818
Phe Phe Phe Phe Xaa Lys Gly Thr Xaa Thr Xaa Leu Pro Phe Xaa Pro
 1               5               10              15

Asn Gln Asn Gln Asn Pro Xaa Gln Ser Ile Xaa Lys Ser Lys Pro Gly
            20              25              30

Gln Asn Gln Asn Glu Xaa Xaa Lys Gln Ser Lys Ser Ser Gln Lys Gln
        35              40              45

Lys Pro Lys Cys Arg Tyr Arg Xaa Xaa Val Gly Asp Gln Ala Thr Leu
    50              55              60

Pro Leu Lys Trp Ser Gly Xaa Xaa Pro Lys Thr Ser Xaa Thr Xaa Phe
65              70              75              80

Xaa Xaa Ser Gly Xaa Gln Xaa Pro Val Pro Ser Gln Xaa Xaa Ala Ala
            85              90              95

Xaa Leu Ile Leu Cys Gly Gly Leu Xaa Asn Ala Xaa Leu Ala Arg Cys
            100             105             110

Ser Thr Gly Xaa Ile Ala Tyr Pro Xaa Val Leu Ser Gly Ser Xaa Ser
        115             120             125

Leu Lys Leu Ala
    130
```

```
<210> 819
<211> 62
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 819
Asn Ser Ala Xaa Gln Thr Thr Pro Ser Leu Ser Tyr Val Phe Leu Leu
 1               5                  10                  15


Gln Thr Thr Arg Gln Leu Leu Lys Pro Ala Ile His Val Tyr Phe Asn
            20                  25                  30


Lys Leu Met Ala Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
        35                  40                  45


Lys Lys Lys Lys Lys Xaa Xaa Gly Gly Gly Pro Pro Pro Pro
    50                  55                  60




<210> 820
<211> 40
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
```

```
<221> SITE
<222> (26)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 820
Asp His Thr Ser Asp Thr Xaa Ala Trp Val Thr Glu Arg Asp Ser Val
 1               5                   10                  15

Xaa Gly Lys Glu Lys Lys Lys Lys Lys Xaa Xaa Gly Gly Ala Pro Val
              20                  25                  30

Pro Asn Trp Pro Tyr Xaa Gly Ser
          35                  40



<210> 821
<211> 64
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 821
Ala Xaa Pro Thr Gln Gln Ser Phe Pro Gln Leu Pro Arg Arg Lys Gly
 1               5                   10                  15

Pro Ser Trp Val Trp Asp His Lys Gly Gly Asp Cys Thr Pro Leu Pro
              20                  25                  30

Leu Gly Pro Gly Cys Gly Gln Arg Pro Pro Cys Val Ser Arg Val Thr
              35                  40                  45

Val Pro Leu Ser Cys Asp Ala Ile Ser Val Cys Ala Trp Ser Pro Gln
   50                  55                  60
```

<210> 822
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 822
His Leu Cys Phe Lys Trp Gly Ser Pro Cys Arg Gly Phe Ile Gly His
1   5   10   15

Trp Leu Ser Lys Cys Gln Xaa Trp Ala Gly Gly Gly Thr Glu Pro Pro
            20   25   30

Gln His Cys Ala Leu Val Glu Lys Ala Leu Thr Cys His Ala Pro Leu
            35   40   45

Lys Pro Pro Leu Leu Thr Cys Leu Leu His Pro Ser His
        50   55   60

<210> 823
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (49)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 823
Thr Ala Gly Arg Trp Pro Trp Lys Ser Glu Ser Ala Lys Glu Cys Val
1   5   10   15

804

```
      Thr Thr His Leu Pro Asn Gln Leu Ala Leu Lys Met Asp Gly Ala Gly
              20              25              30


      Ala Ser Gly Pro Tyr Pro Ser Val Ala Gly Ser Arg Glu Trp Thr Gly
              35              40              45


      Xaa Ala Gly Ala Ala Arg Ala Arg Xaa Val Met Val Cys Val Gly Gly
          50              55              60


      Arg Arg Arg Arg Arg Gly Cys Xaa Val
      65              70
```


<210> 824
<211> 34
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (12)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (31)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 824
```
Pro Arg Xaa Arg Arg Gln Gln Gln Pro His His Xaa Val Ala Asp Gly
  1             5               10              15


Pro His Ala Gly Gly Pro Leu Pro Ala Leu Xaa Arg Arg Leu Xaa Leu
              20              25              30

Pro Leu
```

805

```
<210> 825
<211> 21
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 825
Pro Tyr Ser Glu Ser Xaa Xaa Asn Ser Leu Ala Val Val Leu Gln Arg
 1               5                  10                  15

Arg Asp Xaa Glu Asn
            20




<210> 826
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 826
Met Ser Glu Ala Cys Ile Val Ile Ile Ser Tyr Phe Phe Pro Leu Asp
 1               5                  10                  15

Pro Ser His Gln Met Phe Val Asp Phe Ile Arg Ile Phe Lys Leu Pro
            20                  25                  30
```

806

```
Ala Ser Gly Phe Val Glu Leu Gly Ile Ser Val Ser Leu Ile Phe Xaa
         35                  40                  45

Leu Leu Ser Cys Thr Tyr Phe Xaa
     50                  55



<210> 827
<211> 54
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 827
Asn Ser Lys Xaa Ile Thr Ile Lys Lys Ala Gly Thr Pro Ala Gly Thr
  1               5                  10                  15

Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Thr Ala Ala Arg Arg
         20                  25                  30

Arg Gln Lys Gly Thr Ala Ala Arg Xaa Arg Gln Lys Gly Ala Xaa Glu
         35                  40                  45

Arg Arg Arg Gln Lys Gly
     50



<210> 828
<211> 78
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
```

807

<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 828
Leu Val Phe Thr Glu Thr Leu Arg Glu His Lys Phe Met Gly Phe Leu
 1   5   10   15

Met Met Ile Leu Leu Gly Ile Met Ser Tyr Ser Leu Ser Ser Leu Met
            20   25   30

Asn Val Lys Leu His Cys Ser Gln Arg Phe Xaa Leu Leu Ser Thr Ala
        35   40   45

Ile Asn His Gly His Ser Pro Xaa Asn Ile Ile Phe Phe Leu Leu Lys
        50   55   60

Glu Lys Asn Gly Lys Lys Leu Gln Gly Asn Gly Asn Tyr Tyr
65   70   75

<210> 829
<211> 89
<212> PRT
<213> Homo sapiens

<400> 829
Ser Ala Glu Glu Lys Lys Leu Thr Arg Ile Pro Ser Val Thr Ala Ser
 1   5   10   15

Glu Gln Gly Arg Ala Gln Arg Arg Ile Pro Ala Pro Arg Arg Gly Ala
            20   25   30

Gly His Val Ala Tyr Gly Arg Pro Ala Pro Arg Arg Arg Ser Trp Gly
        35   40   45

Ala Gln Val Leu Leu Ile Glu Ala Gln Pro Val Asp Gly Val Arg Pro
        50   55   60

Val Ala Ala Pro Gly Ala Pro Gly Pro Gly Leu Pro Gly Val Gly Leu
65   70   75   80

Leu Gly Asn Ala Ala Gln Ser Gly Trp
            85

```
<210> 830
<211> 43
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 830
Pro Leu Ile Phe Ile Asn Ser Arg Ile His Thr Asp Ser Pro Gly Ile
 1               5                   10                  15

Val Pro Ser His Ser Glu Asp Ala Leu Arg Thr Leu Gln Ile Leu Leu
            20                  25                  30.

Pro Tyr Ile Thr Leu Asn Ser Gly Leu Arg Xaa
            35                  40
```

```
<210> 831
<211> 110
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (66)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (87)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (89)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)
```

<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (99)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (103)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 831
Lys Asp Ser Leu Asp Ser Gly Lys Leu Leu Gly Ser Gln Leu Gln Phe
 1   5   10   15

Ile Thr Val Lys Gly Gln Arg Leu Arg Ser Ala Lys Gly Gly Gly Ala
            20   25   30

Gln Xaa Arg Ser Thr Thr Asp Glu Ala Thr Ala Ser Ile Cys Pro Leu
        35   40   45

Pro Val Glu Pro Tyr Arg Gln His Leu Ile Leu Thr Ala Thr Cys Asp
    50   55   60

Asn Xaa Gln Glu Val Leu Pro Ile Leu Pro Thr Arg Ala Ala Ser Leu
65   70   75   80

Gly Asp Leu Cys Val Pro Xaa Phe Xaa Val Cys Leu Gly Asp Arg Val
                85   90   95

Trp Xaa Xaa Leu Gly Arg Xaa Arg Val His Gly Gly Asp Ser
            100   105   110

<210> 832
<211> 50
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (20)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 832
Gln Arg Ser Ile Leu Val Thr Trp Phe His Cys His His Leu Val Asp
  1   5   10   15

Val Gln Phe Xaa Thr Ile Leu Ser Ala Pro Ser Gly Ser Leu Ala His

810

```
                    20                  25                  30

     Ser Leu Leu Cys Asn Cys Trp Arg Ile Thr Ala Glu Phe Leu Ala Val
             35                  40                  45

     Leu Ser
         50
```

<210> 833
<211> 47
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (10)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (13)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (17)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (34)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (40)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 833

```
His Leu Lys Leu Leu Gly Leu Glu Arg Xaa Gln Arg Xaa Ser Gly Arg
 1               5                   10                  15

Xaa Thr Thr Leu Gly Gly Arg Ser Thr Gly Leu Val Ile Glu Leu Xaa
             20                  25                  30

Leu Xaa Arg Leu Leu Xaa Cys Xaa Met Asn Cys Asn Ile Cys Leu
         35                  40                  45
```

```
<210> 834
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (2)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (21)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 834
Glu Xaa Xaa Thr Glu Gly Tyr Gly Cys Glu Arg Arg Gln Lys Gly Thr
 1               5                   10                  15

Ala Ala Arg Arg Xaa Gln Lys Gly Thr Ala Ala Arg Arg Arg Gln Lys
             20                  25                  30

Gly Thr Ala Ala Arg Arg Arg Gln Lys Gly Thr Ala Ala Arg Arg Arg
         35                  40                  45

Gln Lys Val Arg Leu Arg Glu Asp Asp Arg Arg Ile Arg Leu Arg Glu
     50                  55                  60

Asp Asp Arg Arg Glu Asn Leu Ser Ser Thr Leu Asn Leu Pro Thr Glu
 65                  70                  75                  80

Pro Ser Lys Ser Pro Cys Lys Phe Asn Cys
             85                  90
```

```
<210> 835
<211> 51
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (28)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (41)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (51)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 835
Asp Ile Xaa Leu Val Phe Ile Leu Lys Gln Phe Leu Gly Leu Phe Arg
 1               5                  10                  15

Gly Ser Leu Cys Cys Leu Tyr Cys Ile Asp Leu Xaa Tyr Arg Cys Leu
            20                  25                  30

Phe Ile Lys Lys Lys Ile Gln Lys Xaa Lys Lys Lys Ile Asn Lys Xaa
        35                  40                  45

Lys Lys Xaa
    50


<210> 836
<211> 47
<212> PRT
<213> Homo sapiens
```

<220>
<221> SITE
<222> (46)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (47)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 836
Ser Ser Leu Gln Lys Asn Leu Val Leu Glu Tyr Phe Leu Lys Gly Ile
1   5   10   15

Leu Asn Thr Ile Lys Thr Ala Phe Phe Phe Pro Ala Ser Ile Gln Pro
            20   25   30

Thr Trp Phe Cys Phe Asn Lys Ser Leu Glu Lys Leu Ile Xaa Xaa
            35   40   45

<210> 837
<211> 733
<212> DNA
<213> Homo sapiens

<400> 837
gggatccgga gcccaaatct tctgacaaaa ctcacacatg cccaccgtgc ccagcacctg 60
aattcgaggg tgcaccgtca gtcttcctct tcccccccaaa acccaaggac accctcatga 120
tctcccggac tcctgaggtc acatgcgtgg tggtggacgt aagccacgaa gaccctgagg 180
tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240
aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300
ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca accccatcg 360
agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420
catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctggtc aaaggcttct 480
atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga 540
ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctcaccgtgg 600
acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660
acaaccacta cacgcagaag agcctctccc tgtctccggg taaatgagtg cgacggccgc 720
gactctagag gat   733

<210> 838
<211> 5
<212> PRT
<213> Homo sapiens

<220>

<210> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 838
Trp Ser Xaa Trp Ser
   1   5

<210> 839
<211> 86
<212> DNA
<213> Homo sapiens

<400> 839
gcgcctcgag atttccccga aatctagatt tccccgaaat gatttccccg aaatgatttc 60
cccgaaatat ctgccatctc aattag   86

<210> 840
<211> 27
<212> DNA
<213> Homo sapiens

<400> 840
gcggcaagct ttttgcaaag cctaggc   27

<210> 841
<211> 271
<212> DNA
<213> Homo sapiens

<400> 841
ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg 60
aaatatctgc catctcaatt agtcagcaac catagtcccg cccctaactc cgcccatccc 120
gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa ttttttttat 180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt 240
ttttggaggc ctaggctttt gcaaaaagct t   271

<210> 842
<211> 32
<212> DNA
<213> Homo sapiens

<400> 842
gcgctcgagg gatgacagcg atagaacccc gg   32

```
<210> 843
<211> 31
<212> DNA
<213> Homo sapiens

<400> 843
gcgaagcttc gcgactcccc ggatccgcct c                              31


<210> 844
<211> 12
<212> DNA
<213> Homo sapiens

<400> 844
ggggactttc cc                                                   12


<210> 845
<211> 73
<212> DNA
<213> Homo sapiens

<400> 845
gcggcctcga ggggactttc ccggggactt tccggggact ttccgggact ttccatcctg 60
ccatctcaat tag                                                  73


<210> 846
<211> 256
<212> DNA
<213> Homo sapiens

<400> 846
ctcgaggga ctttcccggg gactttccgg ggactttccg ggactttcca tctgccatct 60
caattagtca gcaaccatag tcccgcccct aactccgccc atcccgcccc taactccgcc 120
cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga 180
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg 240
cttttgcaaa aagctt                                               256
```

INTERNATIONAL SEARCH REPORT

A.	CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07H 21/04; C07K 5/04, 16/00; G01N 33/53

US CL : 536/23.1; 530/300, 387.9; 436/501

According to International Patent Classification (IPC) or to both national classification and IPC

B.	FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 536/23.1; 530/300, 387.9; 436/501

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

East, GenEmbl, EST, GeneSeq, PIR-63, SwissProt, SPTREMBL, Issued patents sequence database: SEQ ID NO:1 and monoamine adj oxidase

C.	DOCUMENTS CONSIDERED TO BE RELEVANT	

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	ZHU et al. Promoter organization and activity of human monoamine oxidase (MOA) A and B genes. J. Nuerosci. November 1992, Vol. 12, No. 11, pages 4437-4446, especially pages 4438-4439.	1-12, 14-16, 20-23 -------- 13, 17-19
X ----- Y	CHEN et al. The deduced amino acid sequences of human platelet and frontal cortex monoamine oxidase B are identical. J. Neurochem. July 1993, Vol. 61, No. 1, pages 187-190, especially pages 188-190.	1-7, 11-12 ---------- 19
X ----- Y	GRIMSBY et al. Human monoamine oxidase A and B genes exhibit identical exon-intron organization. Proc. Natl. Acad. Sci., USA. May 1991, Vol. 88, pages 3637-3641, especially 3638-3640.	1-12, 20-21 and 23 --------- 17-19

[X] Further documents are listed in the continuation of Box C.   [ ] See patent family annex.

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance		
"E"	earlier document published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
01 JUNE 2000	05 JUL 2000

Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231	Authorized officer MARJORIE MORAN	JOYCE BRIDGERS PARALEGAL SPECIALIST CHEMICAL MATRIX
Facsimile No. (703) 305-3230	Telephone No. (703) 308-1235	

Form PCT/ISA/210 (second sheet) (July 1998)*

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BACH et al. cDNA cloning of human liver monoamine oxidase A and B: Molecular basis of differences in enzymatic properties. Proc. Natl. Acad. Sci., USA. July 1988, Vol. 85, pages 4934-4938, especially pages 4935-4936.	1-16, 20-23
Y		17-19
Y	US 5,783,680 A (BRUNNER et al.) 21 July 1998, columns 5-15.	13, 17-19

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/05881

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
   because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Extra Sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchabl claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite paymer of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report cover only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report i: restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
   1-23, SEQ ID NO:1

Remark on Protest
☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet(1)) (July 1998)*

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING
This ISA found multiple inventions as follows:

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Group I, claim(s)1-10 and 21, drawn to isolated nucleic acid sequences, a gene, a recombinant vector and host cells comprising the sequences.
Group II, claim(s) 11-12 and 14, drawn to an isolated polypeptide and a recombinant host cell expressing the polypeptide.
Group III, claim(s) 13, drawn to an antibody.
Group IV, claim(s)15-16, drawn to a method of making a polypeptide and the polypeptide made.
Group V, claim(s) 17, drawn to a method of preventing, treating, or ameliorating a medical condition by administering a polypeptide or a polynucleotide.
Group VI, claim(s) 18, drawn to a method of diagnosis using a polynucleotide.
Group VII, claim(s) 19, drawn to a method of diagnosis using a polypeptide.
Group VIII, claim(s) 20 and 23, drawn to a method of identifying a binding partner to a polypeptide.
Group IX, claim(s) 22, drawn to a method of identifying biological activity.

In addition, each isolated nucleic acid represented by SEQ ID NO: X is a separate product, not necessarily related to any other nucleic acid represented by SEQ ID NO: X. Each polypeptide is likewise considered a separate product, not necessarily related to any other polypeptide sequence, or to any nucleotide sequence. Applicant is required to elect either ten nucleic acid sequences or one polypeptide sequence for search.

The inventions listed as Groups I-IX do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: every nucleic acid sequence claimed is not unique (SEQ ID NO: 1 is not unique, see the Search report), and therefore does not represent a special technical feature. As the nucleic acid would be the "linking" feature, and the nucleic acid is not a special technical feature, the claims do not relate to a single inventive concept. Because there is no single inventive concept, a method of use is not included with the nucleic acids of Group I.

Although unity of invention is lacking for Groups I-IX, as previously set forth, no invitation to pay for a search for extra groups has been made. However, unity of invention is also lacking with regard to sequences and applicant was invited to pay for a search for additional groups of sequences. Applicant elected only SEQ ID NO:1, therefore no extra search fees are due.

THIS PAGE BLANK (USPTO)